

WEST Search History

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DATE: Wednesday, January 10, 2007

| <u>Hide?</u> | <u>Set Name</u> | <u>Query</u> | <u>Hit Count</u> |
|--|-----------------|---|------------------|
| <i>DB=PGPB; PLUR=YES; OP=ADJ</i> | | | |
| <input type="checkbox"/> | L22 | l21 and (propionate or propionate ester.CLM.) | 63 |
| <input type="checkbox"/> | L21 | l20 and (saponific\$ or acidif\$ or transesterif\$.CLM.) | 78 |
| <input type="checkbox"/> | L20 | l17 and (ring closing or ring closure or cycliz\$ or cyclis\$.CLM.) | 129 |
| <input type="checkbox"/> | L19 | l17 and l18 | 3 |
| <input type="checkbox"/> | L18 | glycidyl lactate or glycolate.CLM. | 621 |
| <input type="checkbox"/> | L17 | l16 and (boron trifluoride or BF3 or acid catalyst or acidic catalyst or mineral acid or solid acid.CLM.) | 859 |
| <input type="checkbox"/> | L16 | l15 and (aldol or condens\$ or coupl\$.CLM.) | 4378 |
| <input type="checkbox"/> | L15 | l13 and l14 | 6618 |
| <input type="checkbox"/> | L14 | epoxide or epoxy compound or ethylene oxide or diethylene oxide.CLM. | 43827 |
| <input type="checkbox"/> | L13 | lactic acid derivative or lactic acid ester or lactate or lactate ester or \$dioxanone.CLM. | 28057 |
| <i>DB=PGPB, USPT, USOC, EPAB, JPAB, DWPI; PLUR=YES; OP=ADJ</i> | | | |
| <input type="checkbox"/> | L12 | l11 and (saponific\$ or acidif\$ or transesterif\$) | 45 |
| <input type="checkbox"/> | L11 | l7 and (ring closing or ring closure or cyclis\$ or cycliz\$) | 72 |
| <input type="checkbox"/> | L10 | l9 and (propionate or propionate ester) | 135 |
| <input type="checkbox"/> | L9 | l8 and (saponific\$ or acidif\$ or transesterif\$) | 207 |
| <input type="checkbox"/> | L8 | l5 and (ring closing or ring closure or cycliz\$ or cyclis\$) | 361 |
| <input type="checkbox"/> | L7 | l5 and l6 | 418 |
| <input type="checkbox"/> | L6 | glycidyl lactate or glycolate | 22380 |
| <input type="checkbox"/> | L5 | l4 and (boron trifluoride or BF3 or acid catalyst or acidic catalyst or mineral acid or solid acid) | 2466 |
| <input type="checkbox"/> | L4 | l3 and (aldol or condens\$ or coupl\$) | 12206 |
| <input type="checkbox"/> | L3 | l1 and l2 | 16291 |
| <input type="checkbox"/> | L2 | epoxide or epoxy compound or ethylene oxide or diethylene oxide | 247772 |
| <input type="checkbox"/> | L1 | lactic acid derivative or lactic acid ester or lactate or lactate ester or \$dioxanone | 83061 |

END OF SEARCH HISTORY

=> d his

(FILE 'HOME' ENTERED AT 13:12:57 ON 10 JAN 2007)

FILE 'CASREACT' ENTERED AT 13:13:13 ON 10 JAN 2007

L1 STRUCTURE UPLOADED
L2 0 S L1
L3 1 S L1 FULL

FILE 'REGISTRY' ENTERED AT 13:14:17 ON 10 JAN 2007

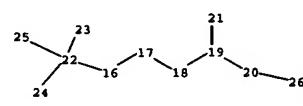
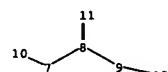
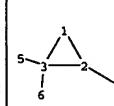
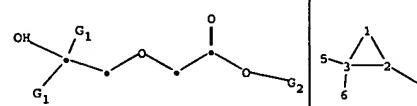
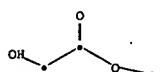
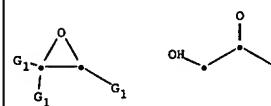
L4 STRUCTURE UPLOADED
L5 5 S L4
L6 610 S L4 FULL
L7 STRUCTURE UPLOADED
L8 3 S L7
L9 678 S L7 FULL

FILE 'HCAPLUS, CHEMCATS' ENTERED AT 13:18:44 ON 10 JAN 2007

L10 957 S L6
L11 431 S L9
L12 33 S L10 AND L11
L13 5 S L5

FILE 'HCAPLUS, HCAOLD, USPATFULL, EPFULL' ENTERED AT 13:32:59 ON 10 JAN 2007

L14 174863 S LACTIC ACID DERIVATIVE OR LACTIC ACID ESTER? OR ?LACTATE OR L
L15 5876 S L14 AND (EPOXIDE OR EPOXY COMPOUND OR ?OXIRANE)
L16 4695 S L15 AND (COUPL? OR CONDENS?)
L17 1038 S L16 AND (BORON TRIFLUORIDE OR BF3 OR ACID CATALYST OR MINERAL
L18 2 S GLYCIDYL LACTATE
L19 167 S L17 AND (RING CLOSING OR RING CLOSURE OR CYCLIZ? OR CYCLIS?)
L20 98 S L19 AND (SAPONIFIC? OR ACIDIFI? OR TRANSESTERIF?)
L21 62 S L20 AND (?PROPIONATE OR ?PROPIONATE ESTER)
L22 12 S L21 AND (FRAGRANCE OR FLAVOR OR FLAVOUR OR ORGANOLEPTIC)



chain nodes :

4 5 6 7 8 9 10 11 12 16 17 18 19 20 21 22 23 24 25 26

ring nodes :

1 2 3

chain bonds :

2-4 3-5 3-6 7-8 7-10 8-9 8-11 9-12 16-17 16-22 17-18 18-19 19-20 19-21
20-26 22-23 22-24 22-25

ring bonds :

1-2 1-3 2-3

exact/norm bonds :

1-2 1-3 2-3 2-4 3-5 3-6 7-10 8-9 8-11 9-12 16-17 17-18 19-20 19-21 20-26
22-23 22-24 22-25

exact bonds :

7-8 16-22 18-19

G1:H, MeO, EtO, n-PrO, i-PrO, PhO, Cb, Ak

G2:Cb, Ak, PhO

Match level :

1:Atom 2:Atom 3:Atom 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS
23:CLASS 24:CLASS 25:CLASS 26:CLASS

fragments assigned product role:

containing 16

fragments assigned reactant/reagent role:

containing 1

containing 7

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 13:13:42 FILE 'CASREACT'

SCREENING COMPLETE - 5051 REACTIONS TO VERIFY FROM 321 DOCUMENTS

99.0% DONE 5000 VERIFIED 0 HIT RXNS 0 DOCS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED VERIFICATIONS: 96774 TO 105266

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1 (0 REACTIONS)

=> s 11 full

FULL SEARCH INITIATED 13:13:49 FILE 'CASREACT'

SCREENING COMPLETE - 101448 REACTIONS TO VERIFY FROM 6314 DOCUMENTS

100.0% DONE 101448 VERIFIED 1 HIT RXNS 1 DOCS
SEARCH TIME: 00.00.18

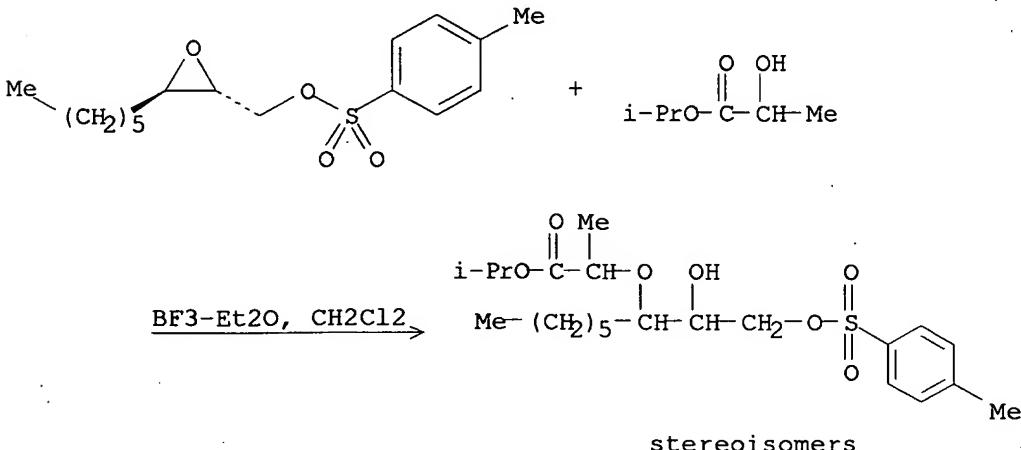
L3 1 SEA SSS FUL L1 (1 REACTIONS)

=> d scan

L3 1 ANSWERS CASREACT COPYRIGHT 2007 ACS on STN

TI Synthesis of acyclic, multifunctionalized α,α' -disecondary ethers with full control of chemo-, regio- and enantioselectivity

RX(7) OF 40



NOTE: stereoselective, regioselective, chemoselective, CHCl_3 /solvent can be also used, 40% overall yield

ALL ANSWERS HAVE BEEN SCANNED

| | | | |
|----------------------|--|------------|---------|
| => file reg | | | |
| COST IN U.S. DOLLARS | | SINCE FILE | TOTAL |
| | | ENTRY | SESSION |
| FULL ESTIMATED COST | | 114.00 | 114.21 |

FILE 'REGISTRY' ENTERED AT 13:14:17 ON 10 JAN 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 9 JAN 2007 HIGHEST RN 917076-17-6
DICTIONARY FILE UPDATES: 9 JAN 2007 HIGHEST RN 917076-17-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

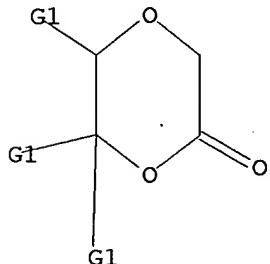
REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>
Uploading C:\Program Files\Stnexp\Queries\059-2.str

L4 STRUCTURE UPLOADED

=> d
L4 HAS NO ANSWERS
L4 STR



G1 H, MeO, EtO, n-PrO, i-PrO, PhO, Cb, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 14
SAMPLE SEARCH INITIATED 13:14:36 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 5433 TO ITERATE

36.8% PROCESSED 2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

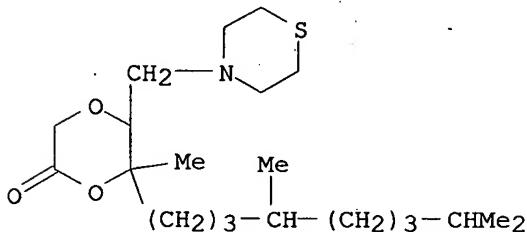
5 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 104241 TO 113079
PROJECTED ANSWERS: 50 TO 492

L5 5 SEA SSS SAM L4

=> d scan

L5 5 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1,4-Dioxan-2-one, 6-(4,8-dimethylnonyl)-6-methyl-5-(4-thiomorpholinylmethyl)- (9CI)
MF C21 H39 N O3 S

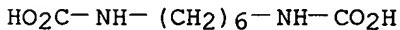


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

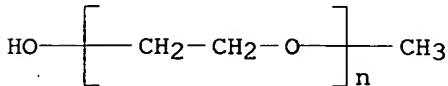
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

L5 5 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with 1,4-dioxan-2-one, 1,6-hexanediylbis[carbamate], ester with α -methyl- ω -hydroxypoly(oxy-1,2-ethanediyl) (2:1:2), block (9CI)
MF C8 H16 N2 O4 . 2 (C6 H8 O4 . C4 H6 O3)x . 2 (C2 H4 O)n C H4 O

CM 1

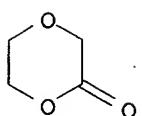


CM 2

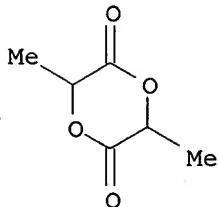


CM 3

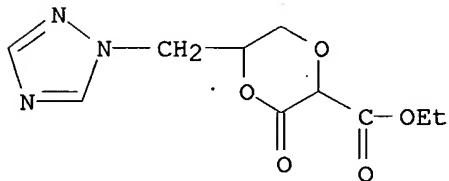
CM 4



CM 5

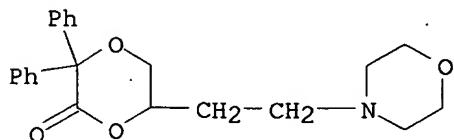


L5 5 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1,4-Dioxane-2-carboxylic acid, 3-oxo-5-(1H-1,2,4-triazol-1-ylmethyl)-,
ethyl ester (9CI)
MF C10 H13 N3 O5



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

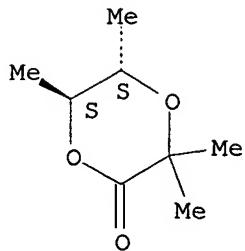
L5 5 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN p-Dioxan-2-one, 6-(2-morpholinoethyl)-3,3-diphenyl-, hydrochloride (8CI)
MF C22 H25 N O4 . Cl H



● HCl

L5 5 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1,4-Dioxan-2-one, 3,3,5,6-tetramethyl-, trans- (9CI)
MF C8 H14 O3

Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> s 14 full

FULL SEARCH INITIATED 13:14:52 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 108902 TO ITERATE

100.0% PROCESSED 108902 ITERATIONS
SEARCH TIME: 00.00.02

610 ANSWERS

L6 610 SEA SSS FUL L4

=>

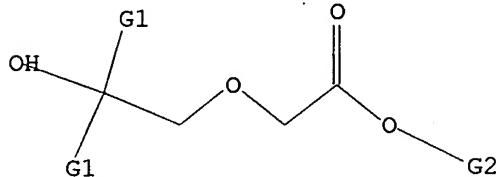
Uploading C:\Program Files\Stnexp\Queries\059-3.str

L7 STRUCTURE UPLOADED

=> d

L7 HAS NO ANSWERS

L7 STR



G1 H, MeO, EtO, n-PrO, i-PrO, PhO, Cb, Ak

G2 Cb, Ak, Ph

Structure attributes must be viewed using STN Express query preparation.

=> s 17

SAMPLE SEARCH INITIATED 13:17:22 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 42754 TO ITERATE

4.7% PROCESSED 2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

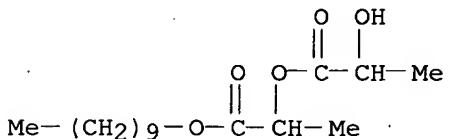
3 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 842734 TO 867426
PROJECTED ANSWERS: 802 TO 1762

L8 3 SEA SSS SAM L7

=> d scan

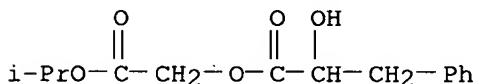
L8 3 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Propanoic acid, 2-hydroxy-, 2-(decyloxy)-1-methyl-2-oxoethyl ester (9CI)
MF C16 H30 O5



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

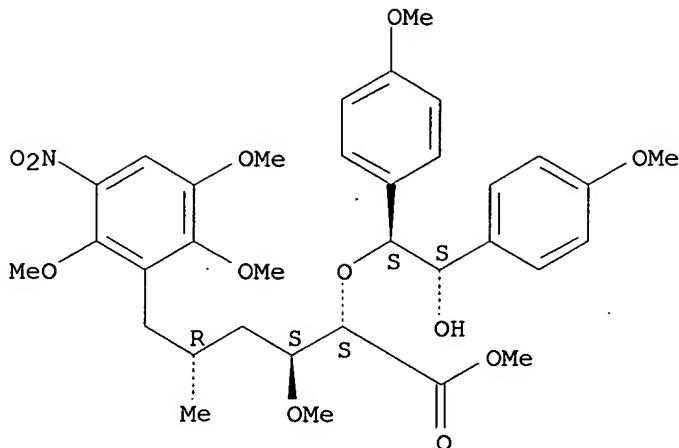
L8 3 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Benzenepropanoic acid, α -hydroxy-, 2-(1-methylethoxy)-2-oxoethyl ester (9CI)
MF C14 H18 O5



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L8 3 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Benzenehexanoic acid, α -[(1S,2S)-2-hydroxy-1,2-bis(4-methoxyphenyl)ethoxy]- β ,2,3,6-tetramethoxy- δ -methyl-5-nitro-, methyl ester, (α S, β S, δ R)- (9CI)
MF C34 H43 N O12

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> s 17 full

FULL SEARCH INITIATED 13:18:18 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 854936 TO ITERATE

100.0% PROCESSED 854936 ITERATIONS
SEARCH TIME: 00.00.11

678 ANSWERS

L9 678 SEA SSS FUL L7

=> d his

(FILE 'HOME' ENTERED AT 13:12:57 ON 10 JAN 2007)

FILE 'CASREACT' ENTERED AT 13:13:13 ON 10 JAN 2007

L1 STRUCTURE uploaded
L2 0 S L1

L3 1 S L1 FULL

FILE 'REGISTRY' ENTERED AT 13:14:17 ON 10 JAN 2007

L4 STRUCTURE uploaded
L5 5 S L4
L6 610 S L4 FULL
L7 STRUCTURE uploaded
L8 3 S L7
L9 678 S L7 FULL

=> file hcaplus chemcat

COST IN U.S. DOLLARS

FULL ESTIMATED COST

| SINCE FILE ENTRY | TOTAL SESSION |
|---------------------|------------------|
| 346.45 | 460.66 |

FILE 'HCAPLUS' ENTERED AT 13:18:44 ON 10 JAN 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE 'CHEMCATS' ENTERED AT 13:18:44 ON 10 JAN 2007

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=> s 16

L10 957 L6

=> s 19

L11 431 L9

=> s 110 and 111

L12 33 L10 AND L11

=> d 1-33 ibib abs hitstr

L12 ANSWER 1 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1085200 HCPLUS

DOCUMENT NUMBER: 145:397958

TITLE: Poly(tetrahydrofuran)/poly(p-dioxanone) triblock copolymer

INVENTOR(S): Wang, Yuzhong; Zhou, Yufang; Yang, Keke; Wang, Xiuli; Chen, Sichong; Zhou, Xi; Ding, Songdong; Wu, Gang

PATENT ASSIGNEE(S): Sichuan University, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|------------------|----------|
| CN 1844191 | A | 20061011 | CN 2006-10020483 | 20060314 |
| PRIORITY APPLN. INFO.: | | | CN 2006-10020483 | 20060314 |

AB Title triblock copolymer with the repetitive structure unit on top of page 2 is prepared by feeding poly(tetrahydrofuran) with mol.wt 500-5000 in reactor, adding catalyst under the protection of inert gas, heating to 60-100°, stirring for 10-50 min, adding p-dioxanone monomer, stirring and reacting at 60-100° for 24-72 h. The obtained triblock copolymer can be used to prepare cyclodextrin clathrate compound, surgical sutures, thin film, sheets, tubes and pipes, plates, foam materials, adhesives, non-woven fabrics degradable materials.

IT 898539-85-0P 898539-86-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and application of polytetrahydrofuran/polyp-dioxanone triblock copolymer)

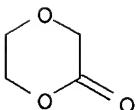
RN 898539-85-0 HCPLUS

CN 1,4-Dioxan-2-one, polymer with tetrahydrofuran, triblock (9CI) (CA INDEX NAME)

CM 1

CRN 3041-16-5

CMF C4 H6 O3



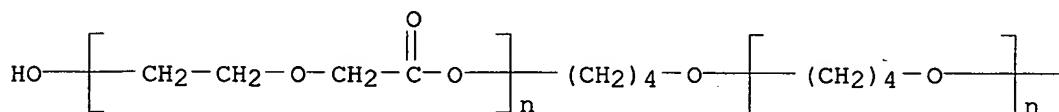
CM 2

CRN 109-99-9
CMF C4 H8 O

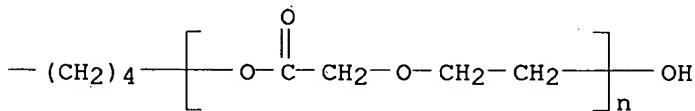


RN 898539-86-1 HCPLUS
CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl], α -(4-hydroxybutyl)- ω -hydroxy-, α -ether with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl) (2:1), triblock (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L12 ANSWER 2 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:922849 HCPLUS
DOCUMENT NUMBER: 145:471949
TITLE: ABA triblock copolymers from poly(p-dioxanone) and poly(ethylene glycol)
AUTHOR(S): Yang, Ke-Ke; Zheng, Li; Wang, Yu-Zhong; Zeng, Jian-Bing; Wang, Xiu-Li; Chen, Si-Chong; Zeng, Qiang; Li, Bin
CORPORATE SOURCE: Center for Degradable and Flame-Retardant Polymeric Materials, College of Chemistry, Sichuan University, Chengdu, 610064, Peop. Rep. China
SOURCE: Journal of Applied Polymer Science (2006), 102(2), 1092-1097
PUBLISHER: CODEN: JAPNAB; ISSN: 0021-8995
John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Poly(p-dioxanone)-poly(ethylene glycol)-poly (p-dioxanone) ABA triblock copolymers (PEDO) were synthesized by ring-opening polymerization from p-dioxanone using poly(ethylene glycol) (PEG) with different mol. wts. as macroinitiators in N₂ atmosphere. The copolymer was characterized by 1H NMR spectroscope. The thermal behavior, crystallization, and thermal stability of these copolymers were investigated by differential scanning calorimetry and thermogravimetric measurements. The water absorption of these copolymers was also measured. The results indicated that the content and length of PEG chain have a greater effect on the properties of copolymers. This kind of biodegradable copolymer will find a potential application in

biomedical materials.

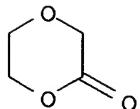
IT 29223-92-5, p-Dioxanone homopolymer
 RL: PRP (Properties)
 (synthesis and characterization of polyethylene oxide-initiated
 p-dioxanone triblock copolymer)

RN 29223-92-5 HCAPLUS

CN 1,4-Dioxan-2-one, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 3041-16-5
 CMF C4 H6 O3

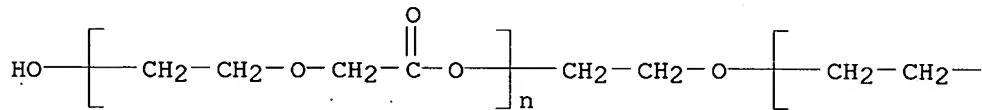


IT 519179-94-3P 837407-65-5P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and characterization of polyethylene oxide-initiated
 p-dioxanone triblock copolymer)

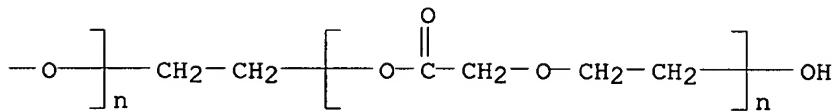
RN 519179-94-3 HCAPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl], α -(2-hydroxyethyl)- ω -hydroxy-, α,α' -ether with
 α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl) (2:1) (9CI) (CA INDEX NAME)

PAGE 1-A



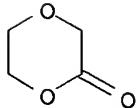
PAGE 1-B



RN 837407-65-5 HCAPLUS
 CN 1,4-Dioxan-2-one, polymer with oxirane, triblock (9CI) (CA INDEX NAME)

CM 1

CRN 3041-16-5
 CMF C4 H6 O3



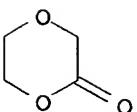
CM 2

CRN 75-21-8
CMF C2 H4 O



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:473183 HCPLUS
DOCUMENT NUMBER: 145:146122
TITLE: Synthesis of block copolymers of poly(p-dioxanone)-block poly(tetrahydrofuran)
AUTHOR(S): Zhou, Yu-Fang; Yang, Ke-Ke; Wang, Yu-Zhong; Wang, Xiu-Li
CORPORATE SOURCE: Center for Degradable and Flame-Retardant Polymeric Materials, College of Chemistry, Sichuan University, Chengdu, 610064, Peop. Rep. China
SOURCE: Polymer Bulletin (Heidelberg, Germany) (2006), 57(2), 151-156
CODEN: POBUDR; ISSN: 0170-0839
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The triblock copolymers of poly(p-dioxanone)-b-poly(tetrahydrofuran)-b-poly(p-dioxanone) were synthesized by ring-opening polymerization of p-dioxanone in the presence of dihydroxyl poly(tetrahydrofuran) (PTHF) using stannous octoate (SnOct₂) as a catalyst. The effects of feed ratio, reaction time and reaction temperature on the copolymer were investigated. It was found that the optimal reaction temperature and time were 80 °C and 42 h, resp., and the molar ratio of p-dioxanone/SnOct₂ (PDO/cat.) had little influence on the inherent viscosity of the copolymers. The triblock copolymers were characterized by various anal. techniques such as 1H-NMR and DSC.
IT 898539-85-0P, p-Dioxanone-THF triblock copolymer
898539-86-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis of triblock poly(p-dioxanone)-poly(tetrahydrofuran) copolymer)
RN 898539-85-0 HCPLUS
CN 1,4-Dioxan-2-one, polymer with tetrahydrofuran, triblock (9CI) (CA INDEX NAME)
CM 1
CRN 3041-16-5
CMF C4 H6 O3



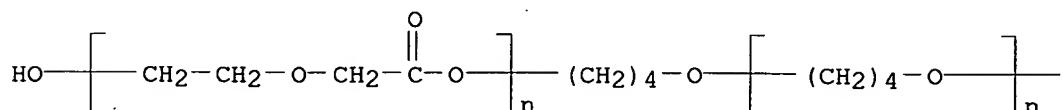
CM 2

CRN 109-99-9
CMF C4 H8 O

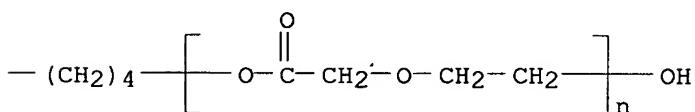


RN 898539-86-1 HCAPLUS
CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl], α -(4-hydroxybutyl)- ω -hydroxy-, α -ether with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl) (2:1), triblock (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:538790 HCAPLUS

DOCUMENT NUMBER: 143:230322

TITLE: Preparation of Hyperbranched Aliphatic Polyester
Derived from Functionalized 1,4-Dioxan-2-one

AUTHOR(S): Yu, Xiang-Hua; Feng, Jun; Zhuo, Ren-Xi

CORPORATE SOURCE: School of Material Science and Engineering, Wuhan Institute of Chemical Technology, and Key Laboratory of Biomedical Polymers (The Ministry of Education), Department of Chemistry, Wuhan University, Wuhan, 430072, Peop. Rep. China

SOURCE: Macromolecules (2005), 38(15), 6244-6247
CODEN: MAMOBX; ISSN: 0024-9297

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB This paper first describes the synthesis of 6-hydroxymethyl-1,4-dioxan-2-one (HDON) designed for the preparation of hyperbranched polymers by self-condensing ring-opening polymerization. A larger number of hydroxyl groups at the side chains of this hyperbranched polyester allow further surface modification and facilitate covalent prodrug attachment.

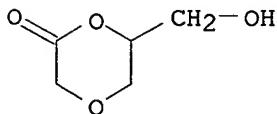
IT 862736-42-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(hyperbranched; synthesis and self-condensing ring-opening polymerization of hydroxymethyldioxanone yielding polyhydroxy-containing hyperbranched aliphatic polyester)

RN 862736-42-3 HCPLUS
CN 1,4-Dioxan-2-one, 6-(hydroxymethyl)-, homopolymer (9CI) (CA INDEX NAME)

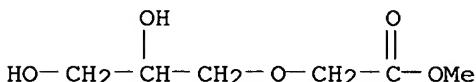
CM 1

CRN 112165-62-5
CMF C5 H8 O4



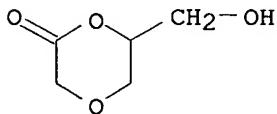
IT 862736-43-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(model compound; synthesis and self-condensing ring-opening polymerization
of
hydroxymethyldioxanone yielding polyhydroxy-containing hyperbranched
aliphatic
polyester)

RN 862736-43-4 HCPLUS
CN Acetic acid, (2,3-dihydroxypropoxy)-, methyl ester (9CI) (CA INDEX NAME)



IT 112165-62-5P, 6-Hydroxymethyl-1,4-dioxan-2-one
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(synthesis and self-condensing ring-opening polymerization of
hydroxymethyldioxanone yielding polyhydroxy-containing hyperbranched
aliphatic
polyester)

RN 112165-62-5 HCPLUS
CN 1,4-Dioxan-2-one, 6-(hydroxymethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:758879 HCPLUS

DOCUMENT NUMBER: 139:395723

TITLE: Total Synthesis of (+)-Geldanamycin and
(-)-o-Quinogeldanamycin: Asymmetric Glycolate Aldol
Reactions and Biological Evaluation

AUTHOR(S): Andrus, Merritt B.; Meredith, Erik L.; Hicken, Erik
J.; Simmons, Bryon L.; Glancey, Russell R.; Ma, Wei

CORPORATE SOURCE: Department of Chemistry and Biochemistry, Brigham
Young University, Provo, UT, 84602-5700, USA

SOURCE: Journal of Organic Chemistry (2003), 68(21), 8162-8169

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER:
DOCUMENT TYPE:
LANGUAGE:
OTHER SOURCE(S):
GI

American Chemical Society
Journal
English
CASREACT 139:395723

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The total synthesis of (+)-geldanamycin (GA), following a linear route, has been completed using a demethylative quinone-forming reaction as the last step. Key steps include the use of two new asym. boron glycolate aldol reactions. To set the anti-C11,12 hydroxymethoxy functionality, (S,S)-5,6-bis-(4-methoxyphenyl)dioxanone was used. Methylglycolate derived from norephedrine I set the C6,7 methoxyurethane stereochem. The quinone formation step using nitric acid gave the non-natural o-quino-GA product II 10:1 over geldanamycin. Other known oxidants gave an unusual azaquinone product III. O-Quino-GA II binds Hsp90 with good affinity but is less cytotoxic compared to GA.

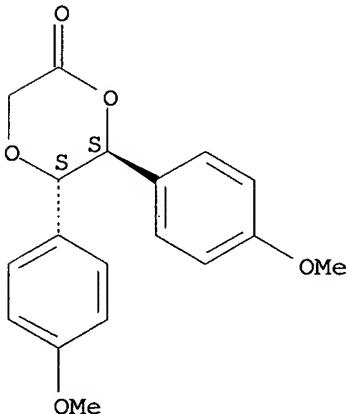
IT 326606-11-5P 326606-16-0P 326606-26-2P
474410-93-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(total synthesis of (+)-geldanamycin and (-)-ortho-quinogeldanamycin via asym. boron glycolate aldol reactions and their cytotoxicity against SKBr3 human cancer cells)

RN 326606-11-5 HCPLUS

CN 1,4-Dioxan-2-one, 5,6-bis(4-methoxyphenyl)-, (5S,6S)- (9CI) (CA INDEX NAME)

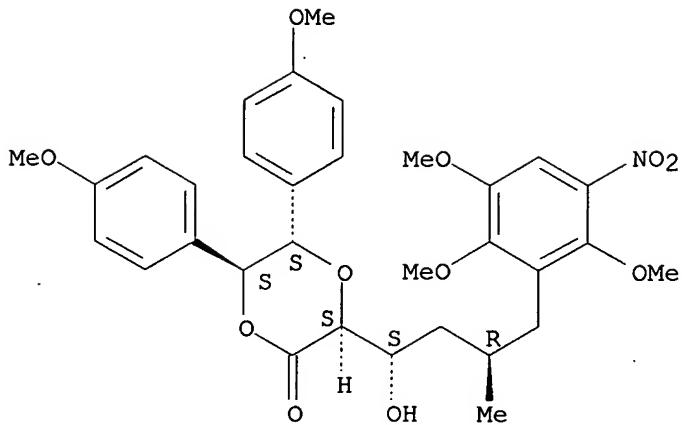
Absolute stereochemistry. Rotation (-).



RN 326606-16-0 HCPLUS

CN 1,4-Dioxan-2-one, 3-[(1S,3R)-1-hydroxy-3-methyl-4-(2,3,6-trimethoxy-5-nitrophenyl)butyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

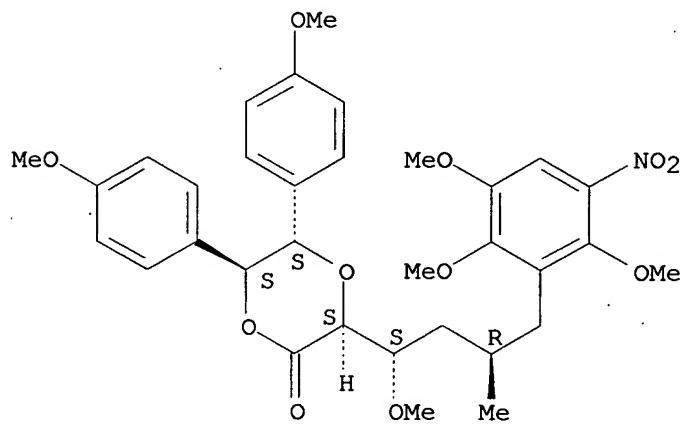
Absolute stereochemistry. Rotation (-).



RN 326606-26-2 HCAPLUS

CN 1,4-Dioxan-2-one, 3-[(1S,3R)-1-methoxy-3-methyl-4-(2,3,6-trimethoxy-5-nitrophenyl)butyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

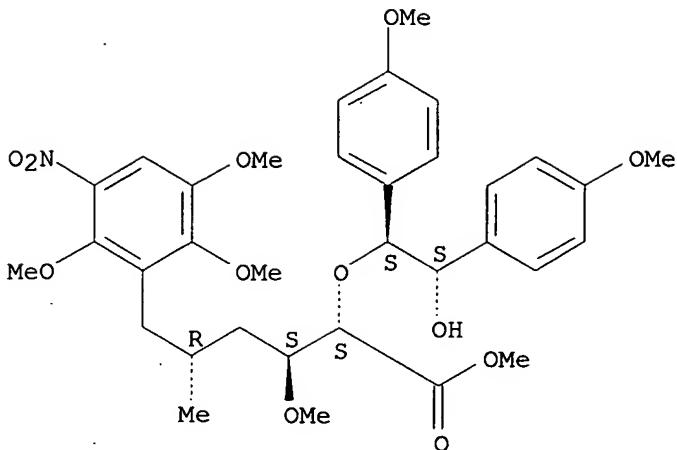
Absolute stereochemistry. Rotation (-).



RN 474410-93-0 HCAPLUS

CN Benzenehexanoic acid, α -[(1S,2S)-2-hydroxy-1,2-bis(4-methoxyphenyl)ethoxy]- β ,2,3,6-tetramethoxy- δ -methyl-5-nitro-, methyl ester, (α S, β S, δ R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:368907 HCAPLUS

DOCUMENT NUMBER: 138:369365

TITLE:

Oxetane-containing (meth)acrylate esters, their manufacture, and their use as dental monomers and monomers for grafting polyolefins

INVENTOR(S): Miyazaki, Kazuhisa; Ota, Seiji; Akie, Hideyuki

PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

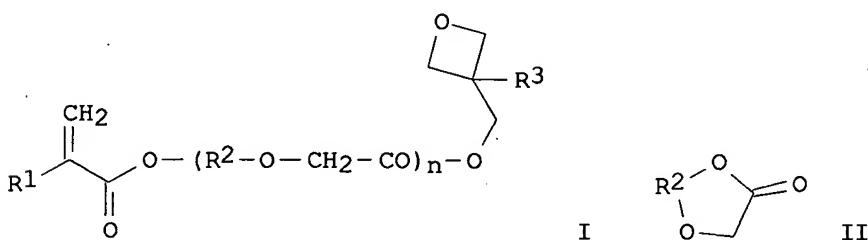
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|----------|
| JP 2003137878 | A | 20030514 | JP 2001-332394 | 20011030 |
| PRIORITY APPLN. INFO.: | | | JP 2001-332394 | 20011030 |
| OTHER SOURCE(S): | MARPAT | 138:369365 | | |
| GI | | | | |



AB Title esters I [R1 = H, Me; R2 = (ether bond-containing) linear or branched alkylene; R3 = linear alkyl; n = 1-4], useful for coatings and adhesives as well, are manufactured by ring-cleavage esterification of lactones II (R2 = same as above) with 3-alkyl-3-hydroxymethyloxetane in the presence of base catalysts, followed by esterification of the resulting products with (meth)acryloyl halide. Thus, 1,4-dioxan-2-one was reacted with 3-ethyl-3-hydroxymethyloxetane in the presence of K2CO3 to give 28%

3-ethyl-3-oxetanymethyl 2-hydroxyethoxyacetate, which was esterified with acryloyl chloride to give 40% 3-ethyl-3-oxetanymethyl 2-acryloxyethoxyacetate.

IT 524067-99-0P

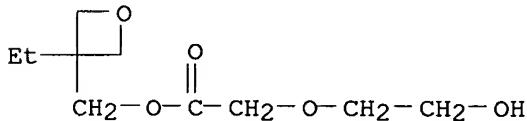
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(manufacture of oxetane-containing (meth)acrylate esters for dental materials,

coatings, adhesives, and grafting of polyolefins)

RN 524067-99-0 HCPLUS

CN Acetic acid, (2-hydroxyethoxy)-, (3-ethyl-3-oxetanymethyl ester (9CI) (CA INDEX NAME)



IT 3041-16-5, 1,4-Dioxan-2-one

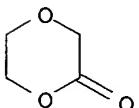
RL: RCT (Reactant); RACT (Reactant or reagent)

(manufacture of oxetane-containing (meth)acrylate esters for dental materials,

coatings, adhesives, and grafting of polyolefins)

RN 3041-16-5 HCPLUS

CN 1,4-Dioxan-2-one (9CI) (CA INDEX NAME)



L12 ANSWER 7 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:134330 HCPLUS

DOCUMENT NUMBER: 138:354347

TITLE: Synthesis and characterization of ABA type tri-block copolymers derived from p-dioxanone, L-lactide and poly(ethylene glycol)

AUTHOR(S): Bhattarai, Narayan; Kim, Hak Yong; Lee, Douk Rae; Park, Soo-Jin

CORPORATE SOURCE: Department of Advanced Organic Materials Engineering, Chonbuk National University, Chon-ju, 561-756, S. Korea

SOURCE: Polymer International (2003), 52(1), 6-14

CODEN: PLYIEI; ISSN: 0959-8103

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of triblock co-polymers, consisting of a poly(ethylene glycol) (PEG) central block joined to 2 blocks of random p-dioxanone-co-L-lactide copolymers were synthesized by ring-opening polymerization of p-dioxanone (PDO) and L-lactide (LLA) initiated by PEG in the presence of stannous 2-ethylhexanoate catalyst. The resulting copolymers were characterized by various techniques including ^1H and ^{13}C NMR and FTIR spectroscopies, gel permeation chromatog., inherent viscosity, wide-angle x-ray diffractometry (WAXD), and differential scanning calorimetry (DSC). The conversion of PDO and L-lactide into the polymer was studied various mole ratios and at different polymerization temperature from ^1H NMR spectra. Results of WAXD and

DSC

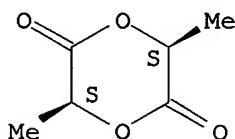
IT showed that the crystallinity of PEG macroinitiator was greatly influenced by the composition of PDO and L-lactide in the copolymer. The triblock copolymers with low mol. weight were soluble in water at below room temperature
110122-20-8P, p-Dioxanone-L-lactide copolymer 205379-45-9P
, p-Dioxanone-ethylene oxide block copolymer 519179-94-3P
RN 110122-20-8 HCPLUS
CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3S,6S)-, polymer with
1,4-dioxan-2-one (9CI) (CA INDEX NAME)

CM 1

CRN 4511-42-6

CMF C6 H8 O4

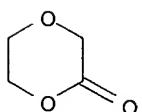
Absolute stereochemistry.



CM 2

CRN 3041-16-5

CMF C4 H6 O3



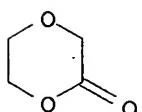
RN 205379-45-9 HCPLUS

CN 1,4-Dioxan-2-one, polymer with oxirane, block (9CI) (CA INDEX NAME)

CM 1

CRN 3041-16-5

CMF C4 H6 O3



CM 2

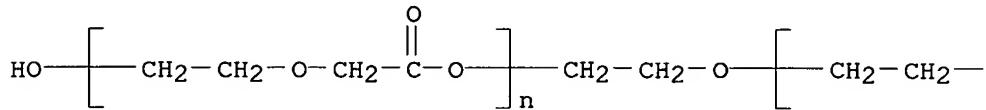
CRN 75-21-8

CMF C2 H4 O

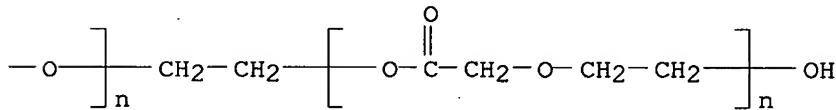


RN 519179-94-3 HCAPLUS
CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl], α -(2-hydroxyethyl)- ω -hydroxy-, α,α' -ether with α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl) (2:1) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

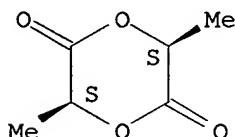


IT 519179-93-2P, p-Dioxanone-ethylene oxide-L-lactide block copolymer
842138-24-3P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(triblock; preparation and characterization of poly(ethylene
glycol)-(lactide-co-dioxanone) triblock polymer)
RN 519179-93-2 HCAPLUS
CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3S,6S)-, polymer with
1,4-dioxan-2-one and oxirane, block (9CI) (CA INDEX NAME)

CM 1

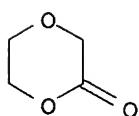
CRN 4511-42-6
CMF C6 H8 O4

Absolute stereochemistry.



CM 2

CRN 3041-16-5
CMF C4 H6 O3



CM 3

CRN 75-21-8
CMF C2 H4 O

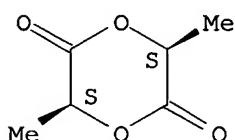


RN 842138-24-3 HCAPLUS
CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3S,6S)-, polymer with
1,4-dioxan-2-one and oxirane, triblock (9CI) (CA INDEX NAME)

CM 1

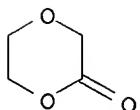
CRN 4511-42-6
CMF C6 H8 O4

Absolute stereochemistry.



CM 2

CRN 3041-16-5
CMF C4 H6 O3



CM 3

CRN 75-21-8
CMF C2 H4 O



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:806282 HCAPLUS

DOCUMENT NUMBER: 138:81040

TITLE: Synthesis and liquid crystalline properties of
5-alkyl-1,4-dioxane-2-carboxylic esters

AUTHOR(S): Braun, Manfred; Spieker, Birgit; Hahn, Antje; Vill,

CORPORATE SOURCE:

Volkmar
Institut fur Organische Chemie und Makromolekulare
Chemie, Universitat Dusseldorf, Dusseldorf, 40225,
Germany

SOURCE:

Synthesis (2002), (14), 2129-2137
CODEN: SYNTBF; ISSN: 0039-7881

PUBLISHER:

Georg Thieme Verlag

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB The 1st route to 5-alkyl substituted and purely trans-configurated 1,4-dioxanecarboxylic acids is described. The mesogenic properties of the esters were studied and compared. An enantioselective route to 1,4-dioxanecarboxylic acid is explained, and takes advantage of the stereoselective addition of the bromolithioalkene to heptanal.

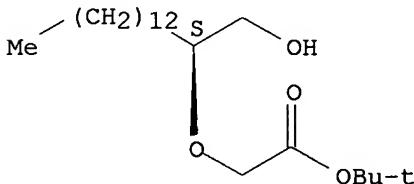
IT 481635-97-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclization of)

RN 481635-97-6 HCPLUS

CN Acetic acid, [(1S)-1-(hydroxymethyl)tetradecyl]oxy-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

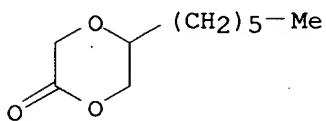


IT 93691-78-2P 481635-85-2P 481635-98-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction of)

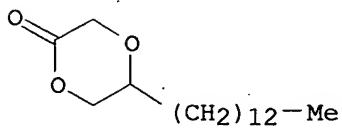
RN 93691-78-2 HCPLUS

CN 1,4-Dioxan-2-one, 5-hexyl- (9CI) (CA INDEX NAME)



RN 481635-85-2 HCPLUS

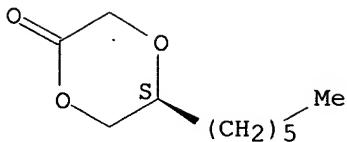
CN 1,4-Dioxan-2-one, 5-tridecyl- (9CI) (CA INDEX NAME)



RN 481635-98-7 HCPLUS

CN 1,4-Dioxan-2-one, 5-hexyl-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT.

L12 ANSWER 9 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:685468 HCPLUS

DOCUMENT NUMBER: 137:352802

TITLE: Total Synthesis of (+)-Geldanamycin and (-)- α -Quinogeldanamycin with Use of Asymmetric Anti- and Syn-Glycolate Aldol Reactions

AUTHOR(S): Andrus, Merritt B.; Meredith, Erik L.; Simmons, Bryon L.; Sekhar, B. B. V. Soma; Hicken, Erik J.

CORPORATE SOURCE: B. B. BOKAY, B. B. BOKAY, KIRK, ELLIS J. DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY.

SOURCE: Department of Chemistry and Biochemistry, Brigham Young University, Provo, UT, 84602-5700, USA
Organic Letters (2002) 4(20) 3549-3552

SOURCE: [Organic Letters \(2002\), 4 \(20\), 3349-3352](http://www.ncbi.nlm.nih.gov/pubmed/1203352)
CODEN: ORLEF2; ISSN: 1523-7060

PUBLISHER: CODEN: CREEPF; ISSN: 1523-7060
American Chemical Society

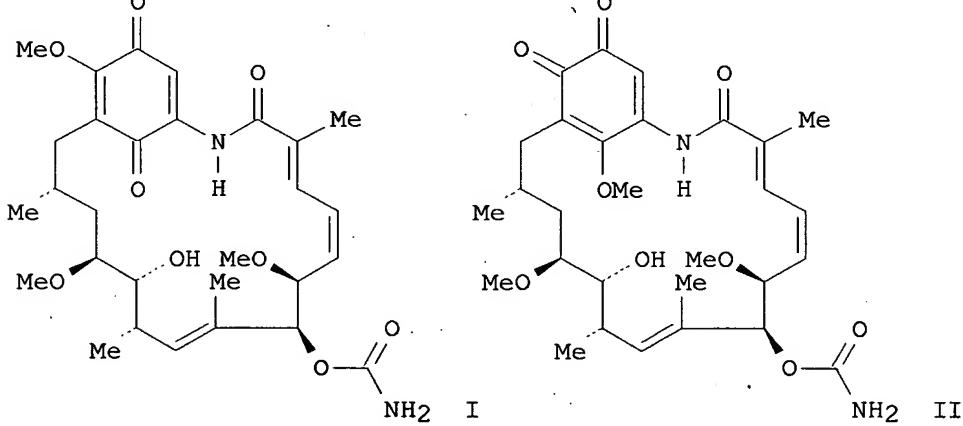
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal

DOCUMENT TYPE: Journal
LANGUAGE: English

LANGUAGE: English
OTHER SOURCE(S): GINGER

OTHER SOURCE(S):

GI



AB Geldanamycin (GA, I), an antitumor Hsp90 inhibitor, was made for the first time by using an oxidative demethylation reaction as the final step. A biaryldioxane auxiliary set the anti C11-12 hydroxy-methoxy functionality and a methylglycolate auxiliary based on norephedrine was used for the syn C6-7 methoxy-urethane. P-Quinone-forming oxidants, CAN and AgO, produced an unusual aza-quinone product. Nitric acid gave GA from a trimethoxy precursor in 55% yield as a 1:10 mixture with non-natural o-quino-GA, II.

IT 326606-11-5P 326606-16-0P 326606-26-2P

474410-93-0P

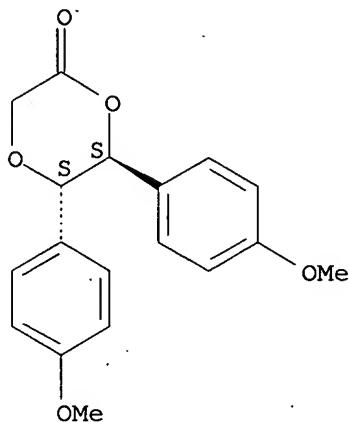
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(total synthesis of (+)-geldanamycin and (-)-o-quinogeldanamycin with use of asym. anti- and syn-glycolate aldol reactions)

RN 326606-11-5 HCAPLUS

CN 1,4-Dioxan-2-one, 5,6-bis(4-methoxyphenyl)-, (5S,6S)- (9CI) (CA INDEX
NAME)

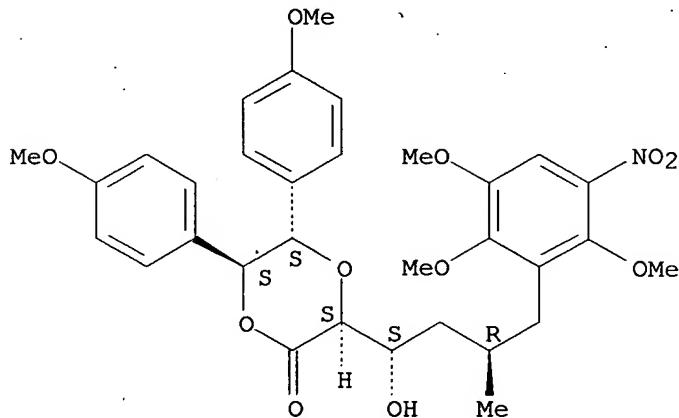
Absolute stereochemistry. Rotation (-).



RN 326606-16-0 HCPLUS

CN 1,4-Dioxan-2-one, 3-[(1S,3R)-1-hydroxy-3-methyl-4-(2,3,6-trimethoxy-5-nitrophenyl)butyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX
NAME)

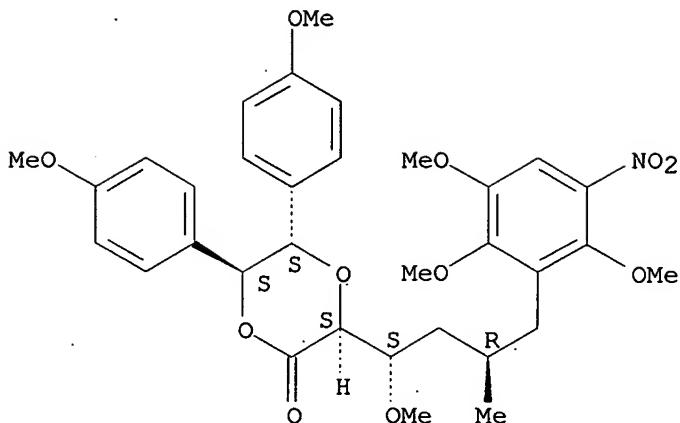
Absolute stereochemistry. Rotation (-).



RN 326606-26-2 HCPLUS

CN 1,4-Dioxan-2-one, 3-[(1S,3R)-1-methoxy-3-methyl-4-(2,3,6-trimethoxy-5-nitrophenyl)butyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX
NAME)

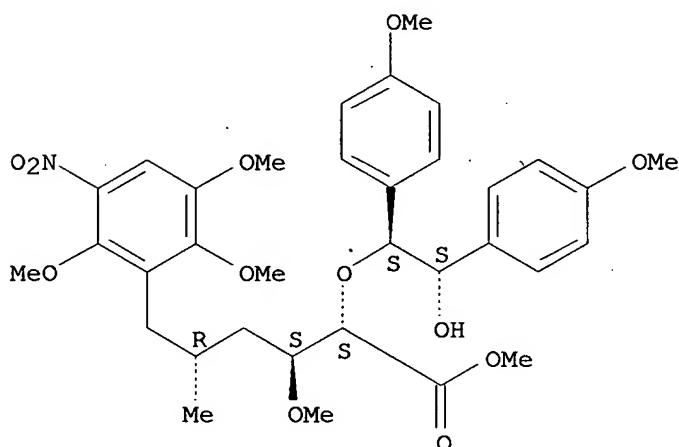
Absolute stereochemistry. Rotation (-).



RN 474410-93-0 HCAPLUS

CN Benzenehexanoic acid, α -[(1S,2S)-2-hydroxy-1,2-bis(4-methoxyphenyl)ethoxy]- β ,2,3,6-tetramethoxy- δ -methyl-5-nitro-, methyl ester, (α S, β S, δ R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT:

32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:469745 HCAPLUS

DOCUMENT NUMBER: 137:384798

TITLE: Efficient synthesis and hydrolysis of cyclic oxalate esters of glycols

AUTHOR(S): Itaya, Taisuke; Iida, Takehiko; Gomyo, Yasuko; Natsutani, Itaru; Ohba, Masashi

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Kanazawa University, Kanazawa, 920-0934, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (2002), 50(3), 346-353

PUBLISHER: CODEN: CPBTAL; ISSN: 0009-2363
Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:384798

AB Based on the mechanism postulated for the formation of the cyclic

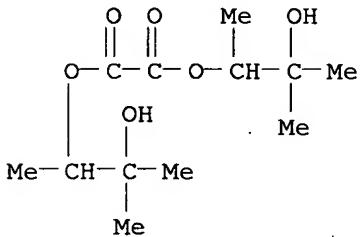
carbonates in the reactions of glycols with oxalyl chloride in the presence of triethylamine, three efficient syntheses of the cyclic oxalates of various glycols by controlling the formation of cyclic oxalates are presented. Replacement of the base by pyridine markedly diminished yields of cyclic oxalates in all reactions, realizing dramatic reversals of the product ratios in the reactions with the (R*,R*)-compds. Although considerable amts. of the oxalate polymers were formed in the reactions with some (R*,S*)-glycols, this drawback can be removed by the use of 2,4,6-collidine instead of pyridine. 1,1'-Oxalyldiimidazole was useful for the synthesis of two selected cyclic oxalates. Some of the cyclic oxalates other than trisubstituted and tetrasubstituted ones were found to be very reactive: kinetic studies on the hydrolysis of 1,4-dioxane-2,3-dione as well as its mono- and some selected 5,6-disubstituted derivs. revealed that they undergo hydrolysis 260-1500 times more rapidly than di-Et oxalate in acetate buffer-acetonitrile (pH 5.69) at 25°. Although the cyclic oxalate from cis-1,2-cyclopentanediol was 1.5 times more reactive than others, it has been shown with other substrates that increasing number of the alkyl substituents decreases the rate of hydrolysis. On the contrary, the Ph group was found to have somewhat accelerative effect.

IT 476213-95-3P

RL: BYP (Byproduct); PREP (Preparation)
(efficient synthesis and hydrolysis of cyclic oxalate esters of glycols)

RN 476213-95-3 HCAPLUS

CN Ethanedioic acid, bis(2-hydroxy-1,2-dimethylpropyl) ester (9CI) (CA INDEX NAME)



IT 3524-70-7P, 1,4-Dioxane-2,3-dione 74888-54-3P

149302-73-8P 149302-74-9P 149302-75-0P

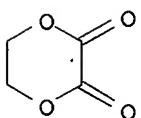
149302-76-1P 149302-84-1P 155244-01-2P

476213-91-9P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(efficient synthesis and hydrolysis of cyclic oxalate esters of glycols)

RN 3524-70-7 HCAPLUS

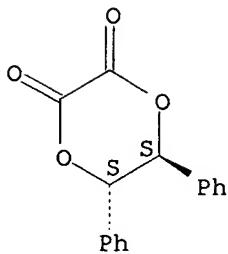
CN 1,4-Dioxane-2,3-dione (9CI) (CA INDEX NAME)



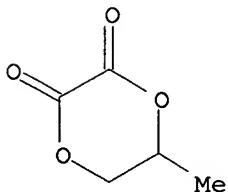
RN 74888-54-3 HCAPLUS

CN 1,4-Dioxane-2,3-dione, 5,6-diphenyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

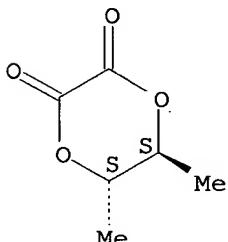


RN 149302-73-8 HCAPLUS
CN 1,4-Dioxane-2,3-dione, 5-methyl- (9CI) (CA INDEX NAME)

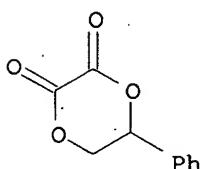


RN 149302-74-9 HCAPLUS
CN 1,4-Dioxane-2,3-dione, 5,6-dimethyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

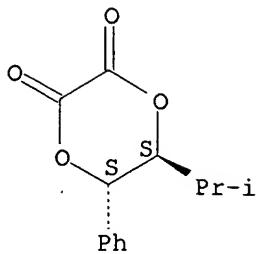


RN 149302-75-0 HCAPLUS
CN 1,4-Dioxane-2,3-dione, 5-phenyl- (9CI) (CA INDEX NAME)



RN 149302-76-1 HCAPLUS
CN 1,4-Dioxane-2,3-dione, 5-(1-methylethyl)-6-phenyl-, trans- (9CI) (CA INDEX NAME)

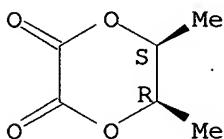
Relative stereochemistry.



RN 149302-84-1 HCAPLUS

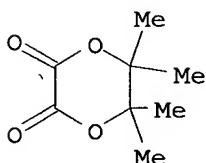
CN 1,4-Dioxane-2,3-dione, 5,6-dimethyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



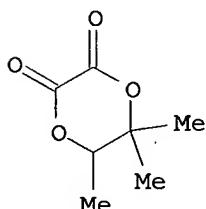
RN 155244-01-2 HCAPLUS

CN 1,4-Dioxane-2,3-dione, 5,5,6,6-tetramethyl- (9CI) (CA INDEX NAME)



RN 476213-91-9 HCAPLUS

CN 1,4-Dioxane-2,3-dione, 5,5,6-trimethyl- (9CI) (CA INDEX NAME)



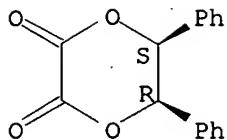
IT 74888-53-2P 155244-03-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(efficient synthesis and hydrolysis of cyclic oxalate esters of
glycols)

RN 74888-53-2 HCAPLUS

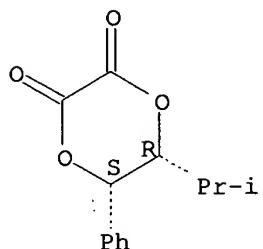
CN 1,4-Dioxane-2,3-dione, 5,6-diphenyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 155244-03-4 HCAPLUS
 CN 1,4-Dioxane-2,3-dione, 5-(1-methylethyl)-6-phenyl-, cis- (9CI) (CA INDEX
 NAME)

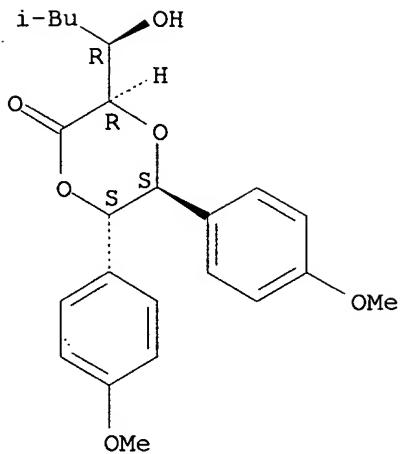
Relative stereochemistry.



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 11 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2002:136843 HCAPLUS
 DOCUMENT NUMBER: 137:169466
 TITLE: Glycolate aldol reactions with boron enolates of
 bis-4-methoxyphenyldioxanone
 AUTHOR(S): Andrus, Merritt B.; Mendenhall, Kris G.; Meredith,
 Erik L.; Soma Sekhar, B. B. V.
 CORPORATE SOURCE: Department of Chemistry and Biochemistry, C100 BNSN,
 Brigham Young University, Provo, UT, 84602-5700, USA
 SOURCE: Tetrahedron Letters (2002), 43(10), 1789-1792
 CODEN: TELEAY; ISSN: 0040-4039
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 137:169466
 AB The boron enolate of 5S,6S-bis(4-methoxyphenyl)-2-dioxanone reacted with
 various aldehydes to produce anti glycolate aldol products in high yield
 with good selectivity. The outcome is consistent with an E-enolate
 reacting through a closed transition state. The adducts were protected
 and the auxiliary was conveniently removed with ceric ammonium nitrate to
 give protected dihydroxy acids which are useful intermediates.
 IT 448293-90-1P
 RL: BYP (Byproduct); PREP (Preparation)
 (preparation and stereoselective aldol reactions of 5S,6S-bis(4-
 methoxyphenyl)-2-dioxanone)
 RN 448293-90-1 HCAPLUS
 CN 1,4-Dioxan-2-one, 3-[(1R)-1-hydroxy-3-methylbutyl]-5,6-bis(4-
 methoxyphenyl)-, (3R,5S,6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



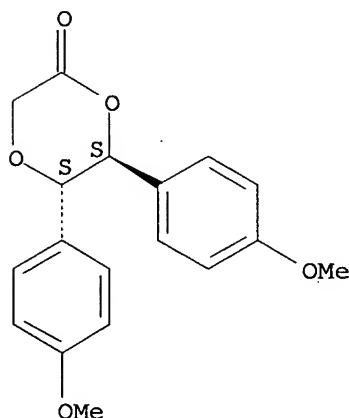
IT 326606-11-5P 448293-78-5P 448293-80-9P
 448293-84-3P 448293-92-3P 448293-94-5P
 448293-96-7P 448293-98-9P 448294-00-6P
 448294-02-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and stereoselective aldol reactions of 5S,6S-bis(4-methoxyphenyl)-2-dioxanone)

RN 326606-11-5 HCPLUS

CN 1,4-Dioxan-2-one, 5,6-bis(4-methoxyphenyl)-, (5S,6S)- (9CI) (CA INDEX NAME)

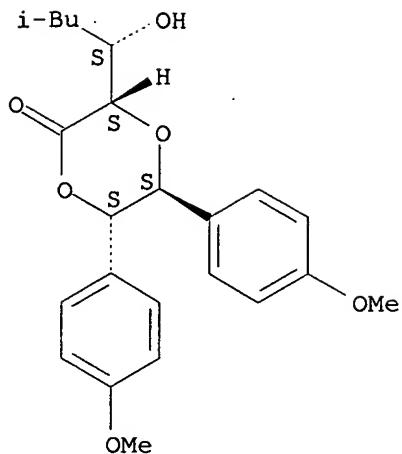
Absolute stereochemistry. Rotation (-).



RN 448293-78-5 HCPLUS

CN 1,4-Dioxan-2-one, 3-[(1S)-1-hydroxy-3-methylbutyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

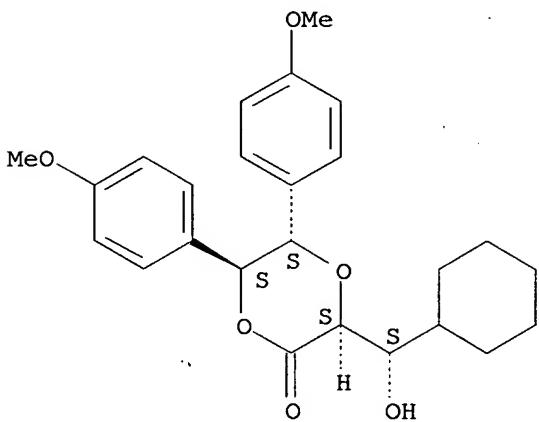
Absolute stereochemistry. Rotation (-).



RN 448293-80-9 HCPLUS

CN 1,4-Dioxan-2-one, 3-[(S)-cyclohexylhydroxymethyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

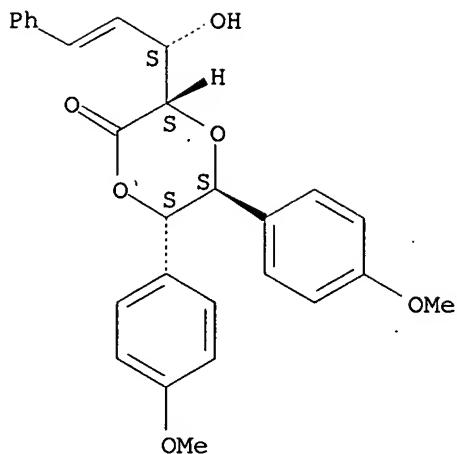


RN 448293-84-3 HCPLUS

CN L-erythro-Pent-4-enonic acid, 1,2-O-[(1S,2S)-1,2-bis(4-methoxyphenyl)-1,2-ethanediyl]-4,5-dideoxy-5-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

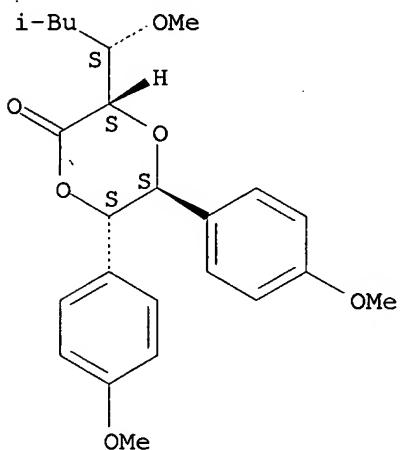
Double bond geometry unknown.



RN 448293-92-3 HCPLUS

CN 1,4-Dioxan-2-one, 3-[(1S)-1-methoxy-3-methylbutyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

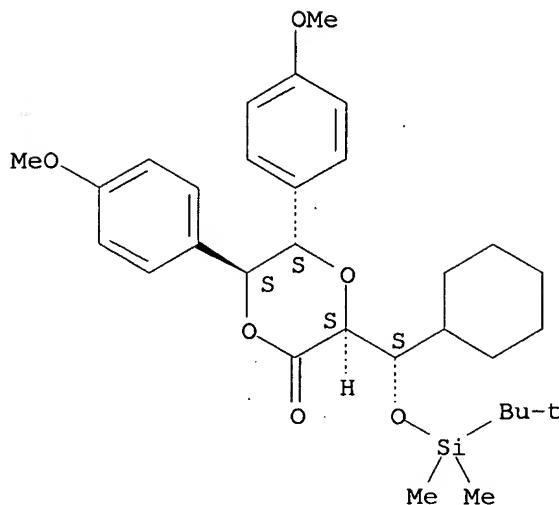
Absolute stereochemistry.



RN 448293-94-5 HCPLUS

CN 1,4-Dioxan-2-one, 3-[(S)-cyclohexyl[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

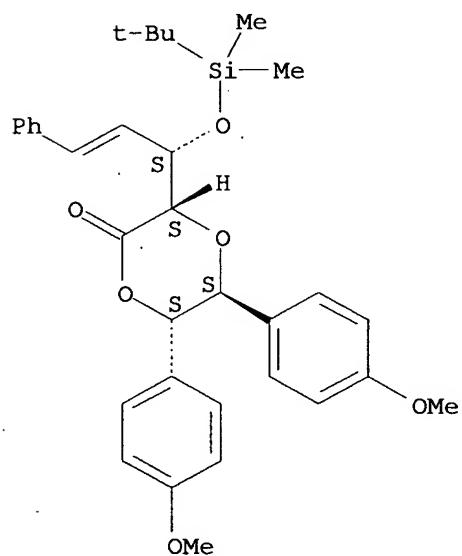


RN 448293-96-7 HCPLUS

CN L-erythro-Pent-4-enonic acid, 1,2-O-[(1S,2S)-1,2-bis(4-methoxyphenyl)-1,2-ethanediyl]-4,5-dideoxy-3-O-[(1,1-dimethylethyl)dimethylsilyl]-5-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

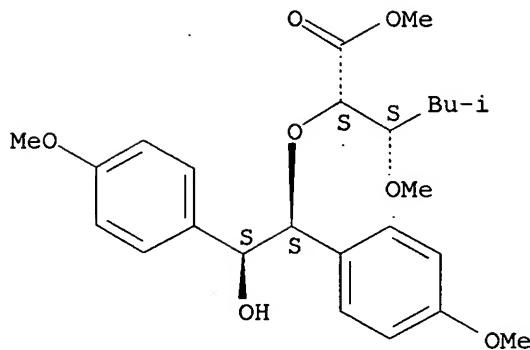
Double bond geometry unknown.



RN 448293-98-9 HCPLUS

CN Hexanoic acid, 2-[(1S,2S)-2-hydroxy-1,2-bis(4-methoxyphenyl)ethoxy]-3-methoxy-5-methyl-, methyl ester, (2S,3S)- (9CI) (CA INDEX NAME)

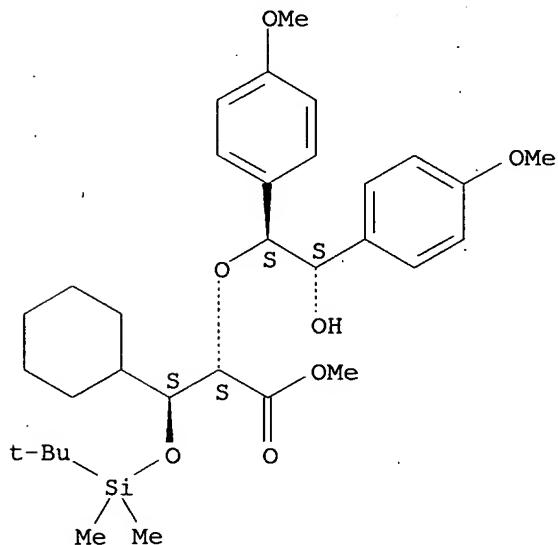
Absolute stereochemistry.



RN 448294-00-6 HCPLUS

CN Cyclohexanepropanoic acid, β -[[[(1,1-dimethylethyl)dimethylsilyl]oxy]- α -[(1S,2S)-2-hydroxy-1,2-bis(4-methoxyphenyl)ethoxy]-, methyl ester, (α S, β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

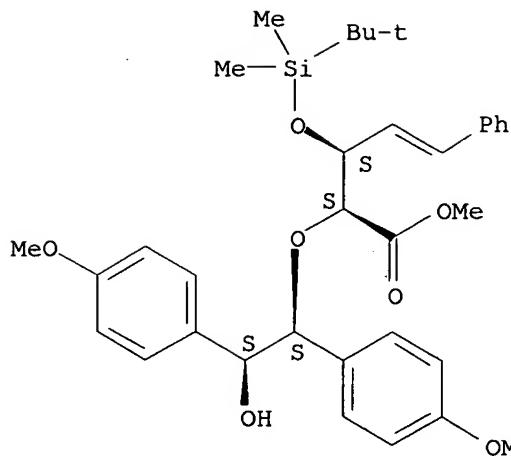


RN 448294-02-8 HCPLUS

CN L-erythro-Pent-4-enonic acid, 4,5-dideoxy-3-O-[(1,1-dimethylethyl)dimethylsilyl]-2-O-[(1S,2S)-2-hydroxy-1,2-bis(4-methoxyphenyl)ethyl]-5-phenyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



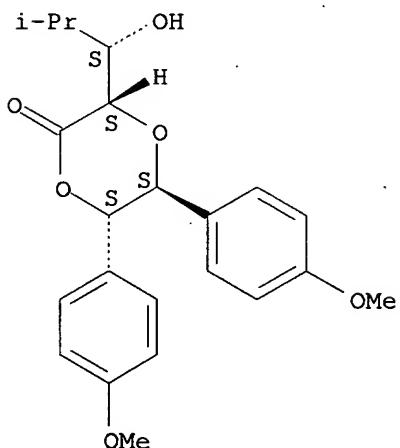
IT 448293-76-3P 448293-82-1P 448293-86-5P
 448293-88-7P 448294-10-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and stereoselective aldol reactions of 5S,6S-bis(4-methoxyphenyl)-2-dioxanone)

RN 448293-76-3 HCAPLUS

CN L-erythro-Pentonic acid, 1,2-O-[(1S,2S)-1,2-bis(4-methoxyphenyl)-1,2-ethanediyl]-4,5-dideoxy-4-methyl- (9CI) (CA INDEX NAME)

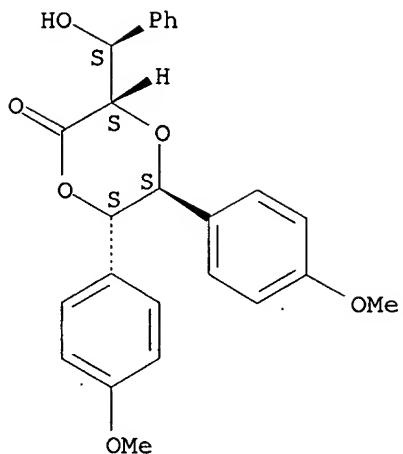
Absolute stereochemistry.



RN 448293-82-1 HCAPLUS

CN 1,4-Dioxan-2-one, 3-[(S)-hydroxyphenylmethyl]-5,6-bis(4-methoxyphenyl)-, (3S,5S,6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

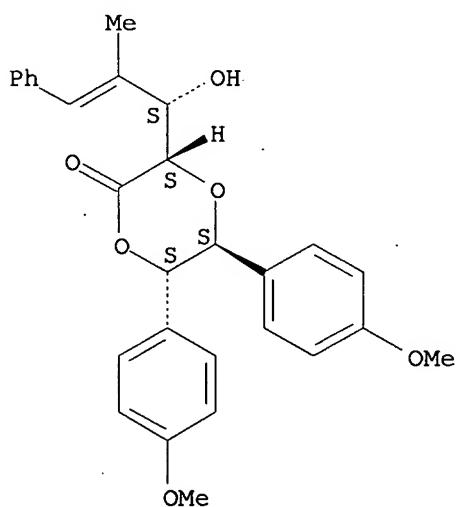


RN 448293-86-5 HCPLUS

CN L-erythro-Pent-4-enonic acid, 1,2-O-[(1S,2S)-1,2-bis(4-methoxyphenyl)-1,2-ethanediyl]-4,5-dideoxy-4-methyl-5-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

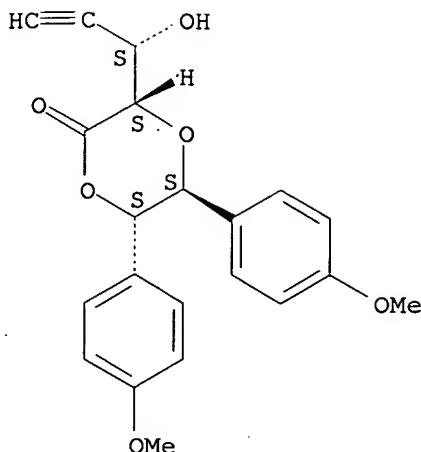
Double bond geometry unknown.



RN 448293-88-7 HCPLUS

CN L-erythro-Pent-4-ynonic acid, 1,2-O-[(1S,2S)-1,2-bis(4-methoxyphenyl)-1,2-ethanediyl]-4,5-dideoxy- (9CI) (CA INDEX NAME)

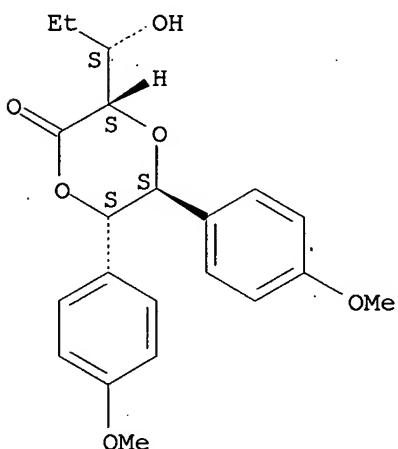
Absolute stereochemistry.



RN 448294-10-8 HCPLUS

CN L-erythro-Pentonic acid, 1,2-O-[(1S,2S)-1,2-bis(4-methoxyphenyl)-1,2-ethanediyl]-4,5-dideoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:885853 HCPLUS

DOCUMENT NUMBER: 136:25147

TITLE: Shape memory thermoplastics and polymer networks for tissue engineering

INVENTOR(S): Lendlein, Andreas; Knischka, Ralf; Kratz, Karl

PATENT ASSIGNEE(S): Mnemoscience GmbH, Germany

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2001091822 | A1 | 20011206 | WO 2001-EP6210 | 20010531 |

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 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
 RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
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 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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 EP 1284756 A1 20030226 EP 2001-938245 20010531
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 ES 2230318 T3 20050501 ES 2001-1938245 20010531
 US 2004110285 A1 20040610 US 2003-297147 20030728
 US 2000-208285P P 200000531
 WO 2001-EP6210 W 20010531
 PRIORITY APPLN. INFO.:

AB Methods and compns. are described herein for reconstruction of different functional tissues. Dissociated cells, differentiated cells, adult mesenchymal stem cells or embryonic stem cells are seeded on a scaffold. The scaffold will consist of a biocompatible, biodegradable shape memory ("SM") polymers. In addition bioactive substances may be incorporated in the scaffold. Thermoplastic as well as thermoset materials with SM-effect can be used. The shape memory effect will be applied as an interactive link between the cells and the used polymeric scaffold. The degradation kinetics as well as shape memory transition temperature will be tailored by adjusting to monomer ratios of the co-oligomers. The shape memory effect will be used to create a degradation or release of bioactive substances on demand, induce forces on seeded cells or induce proliferation and differentiation of cells. For example, a polymer network was prepared from a mixture of poly(ϵ -caprolactone) dimethacrylate and a proper amount of Bu acrylate by heating to 10° above the melting temperature and photocuring.

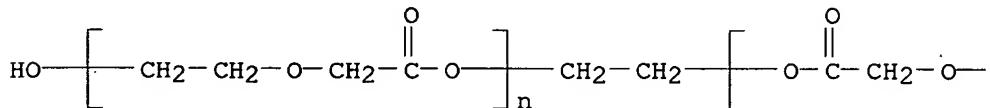
IT 377730-22-8P 377733-18-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(biodegradable shape memory thermoplastics and polymer networks for tissue engineering)

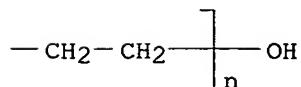
RN 377730-22-8 HCPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl], α,α' -1,2-ethanediylbis[ω -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RN 377733-18-1 HCPLUS

CN 1,4-Dioxan-2-one, homopolymer, ester with 1,2-ethanediol (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 107-21-1
CMF C2 H6 O2

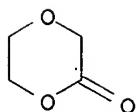
HO-CH₂-CH₂-OH

CM 2

CRN 29223-92-5
CMF (C₄ H₆ O₃)_x
CCI PMS

CM 3

CRN 3041-16-5
CMF C₄ H₆ O₃



IT 377733-20-5P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(multiblock; biodegradable shape memory thermoplastics and polymer networks for tissue engineering)

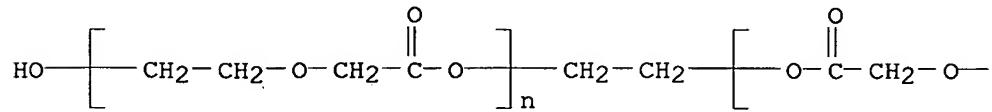
RN 377733-20-5 HCPLUS

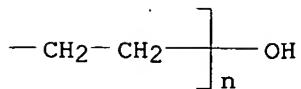
CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3S,6S)-, polymer with 1,6-diisocyanato-2,2,4(or 2,4,4)-trimethylhexane, 1,4-dioxane-2,5-dione, α, α' -1,2-ethanediylbis[ω -hydroxypoly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl]] and α, α' -1,2-ethanediylbis[ω -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]], block (9CI) (CA INDEX NAME)

CM 1

CRN 377730-22-8
CMF (C₄ H₆ O₃)_n (C₄ H₆ O₃)_n C₂ H₆ O₂
CCI PMS

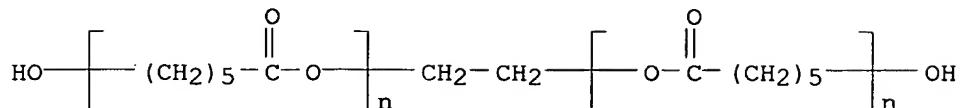
PAGE 1-A





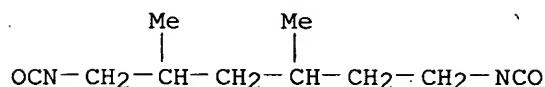
CM 2

CRN 59692-54-5
CMF (C6 H10 O2)n (C6 H10 O2)n C2 H6 O2
CCI PMS



CM 3

CRN 32052-51-0
CMF C11 H18 N2 02
CCI IDS

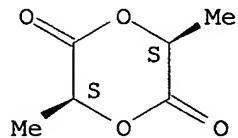


D1-Me

CM 4

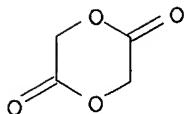
CRN 4511-42-6
CMF C6 H8 O4

Absolute stereochemistry.



CM 5

CRN 502-97-6
CMF C4 H4 O4



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 13 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:111826 HCAPLUS

DOCUMENT NUMBER: 132:293750

TITLE: Synthesis and Study of C3-Symmetric Hydropyran Cyclooligolides with Oriented Aryl and Alcohol Appendages at 10 Å Spacing

Burke, Steven D.; Zhao, Qian

CORPORATE SOURCE: Department of Chemistry, University of

Wisconsin-Madison, Madison, WI, 53706-1396, USA

SOURCE: Journal of Organic Chemistry (2000), 65(5), 1489-1500

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 132:293750

AB Modular syntheses of C3-sym. macrocycles with pendant aryl and hydroxymethyl groups are described. These functional groups, amenable to further elaboration, were installed early in each synthesis and carried through an iterative sequence of module coupling and macrolactonization. Association consts. for the macrolides with alkali metal cation guests were determined, and sandwich-type complexes with Ba²⁺ were confirmed for these macrocycles based on ¹H NMR studies, including Job plots. X-ray crystallog. data for the macrocycles were obtained and are discussed in detail. These data provide support that the macrocycles are structurally well-defined and preorganized for binding the potassium cation. Preparation of the tris(bromoacetylated) macrotriolide exemplifies a functionalized platform suitable for elaboration with peptide or carbohydrate residues.

IT 264132-24-3P 264132-25-4P 264132-27-6P

264132-39-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

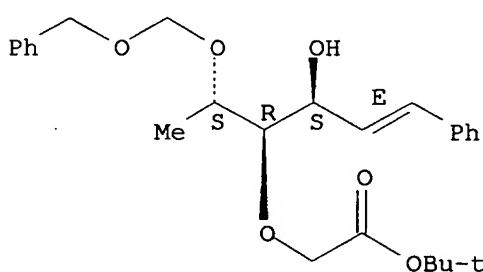
(preparation and complexation of C3-sym. hydropyran cyclooligolides with oriented aryl and alc. appendages at 10 Å spacing)

RN 264132-24-3 HCAPLUS

CN Acetic acid, [(1R,2S,3E)-2-hydroxy-4-phenyl-1-[(1S)-1-[(phenylmethoxy)methoxy]ethyl]-3-but enyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

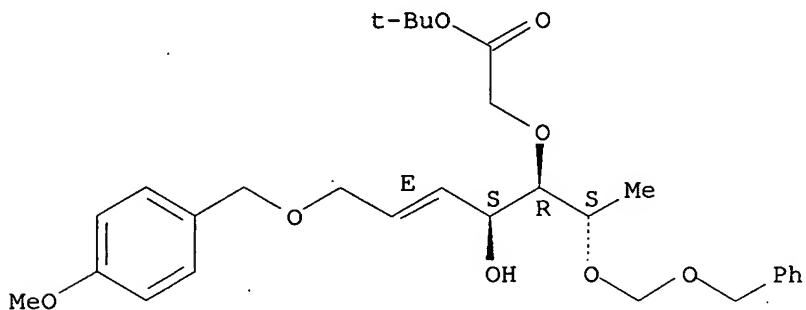
Double bond geometry as shown.



RN 264132-25-4 HCAPLUS

CN L-arabino-Hept-2-enitol, 2,3,7-trideoxy-5-O-[2-(1,1-dimethylethoxy)-2-oxoethyl]-1-O-[(4-methoxyphenyl)methyl]-6-O-[(phenylmethoxy)methyl]-, (2E)- (9CI) (CA INDEX NAME)

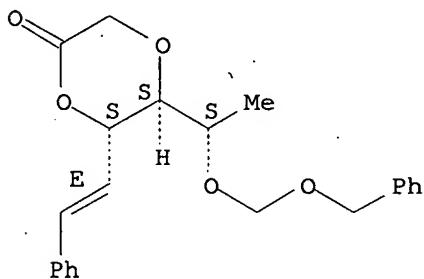
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 264132-27-6 HCPLUS

CN 1,4-Dioxan-2-one, 6-[(1E)-2-phenylethenyl]-5-[(1S)-1-[(phenylmethoxy)methoxy]ethyl]-, (5S,6S)- (9CI) (CA INDEX NAME)

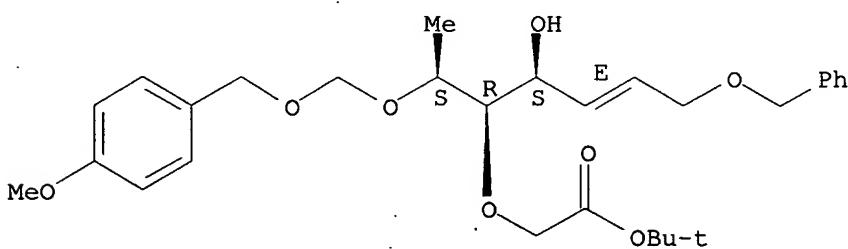
Absolute stereochemistry.
Double bond geometry as shown.



RN 264132-39-0 HCPLUS

CN L-arabino-Hept-2-enitol, 2,3,7-trideoxy-5-O-[2-(1,1-dimethylethoxy)-2-oxoethyl]-6-O-[(4-methoxyphenyl)methoxy]methyl]-1-O-[(phenylmethoxy)methyl]-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



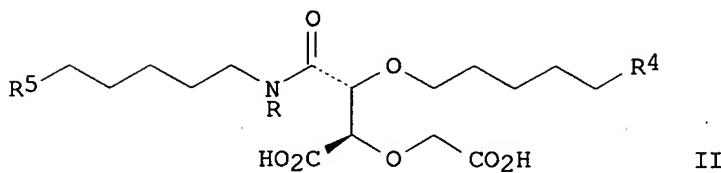
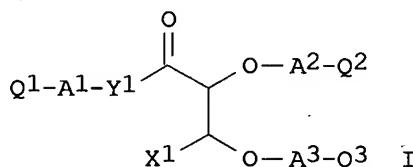
REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2000:15153 HCAPLUS
 DOCUMENT NUMBER: 132:78549
 TITLE: Preparation of tartaric acid derivatives as squalene synthase inhibitors
 INVENTOR(S): Usui, Hiroyuki; Kagechika, Katsuji; Nagashima, Hajime; Nagamochi, Masatoshi; Ohta, Masahiro; Yokomizo, Aki; Motoki, Kayoko
 PATENT ASSIGNEE(S): Daiichi Pharmaceutical Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 347 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2000000458 | A1 | 20000106 | WO 1999-JP3411 | 19990625 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9943940 | A | 20000117 | AU 1999-43940 | 19990625 |
| PRIORITY APPLN. INFO.: | | | JP 1998-181272 | A 19980626 |
| | | | WO 1999-JP3411 | W 19990625 |

OTHER SOURCE(S): MARPAT 132:78549

GI



AB 2,3-Dihydroxypropanoic acid compds. represented by general formula [I; X1 represents optionally esterified carboxy, tetrazol-5-yl, P(O)(OH)2, or SO3H; Y1 represents a single bond, O, (un)substituted NH; at least one of A1, A2 and A3 represents a group represented by the following general formula R2-a1-R3-a2- (wherein R2 represents divalent C2-12 hydrocarbyl; R3 represents a single bond or a divalent C2-12 hydrocarbyl; and a1 and a2 represent each a single bond, S, SO2, SO2NH, O, (un)substituted NH or CONH, CO, etc.); and at least one of Q1, Q2 and Q3

represents cyclic hydrocarbyl or a heterocycle while the remaining one(s) represent hydrogen, optionally esterified carboxy, hydrocarbyl or a heterocycle] or salts are prepared. Because of having a potent inhibitory effect on squalene synthase, these compds. are useful as preventives and/or remedies for hypercholesterolemia, hyperlipemia, and arteriosclerosis. Thus, tert-Bu (2R,3R)-3-carboxy-2-(tert-butoxycarbonylmethoxy)-3-[5-(2-naphthyl)pentyl]propanoate (preparation given) was condensed with 5-(2-naphthyl)pentylamine hydrochloride using 4-dimethylaminopyridine and 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride in CH₂Cl₂ at room temperature for 21 h, followed by deprotection, to give L-tartaric acid derivative (II; R = H, R₄ = R₅ = 2-naphthyl) (III). III and II (R = Me, R₄ = 3,4-dimethylphenyl, R₅ = benzothiazol-6-yl) showed IC₅₀ of 0.15 + 10⁻⁵ and 0.002 + 10⁻⁵ M, resp., for inhibiting the cholesterol synthesis in rat liver cells.

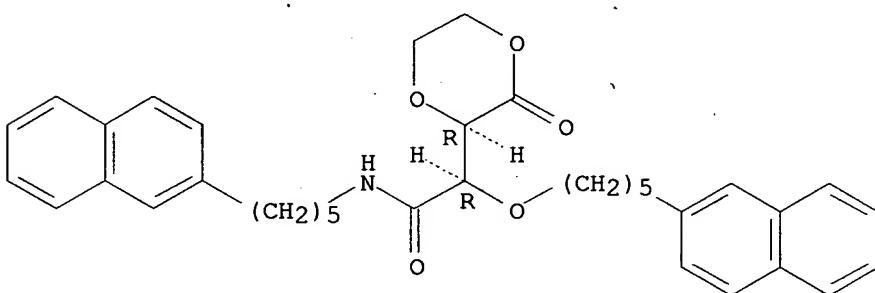
IT 210053-85-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tartaric acid derivs. as squalene synthase inhibitors as preventives and/or remedies for hypercholesterolemia, hyperlipemia, and arteriosclerosis)

RN 210053-85-3 HCPLUS

CN 1,4-Dioxane-2-acetamide, N-[5-(2-naphthalenyl)pentyl]- α -[[5-(2-naphthalenyl)pentyl]oxy]-3-oxo-, (αR,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



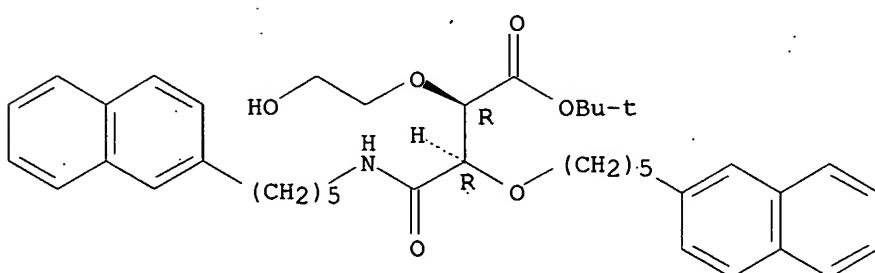
IT 210055-01-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of tartaric acid derivs. as squalene synthase inhibitors as preventives and/or remedies for hypercholesterolemia, hyperlipemia, and arteriosclerosis)

RN 210055-01-9 HCPLUS

CN Butanoic acid, 2-(2-hydroxyethoxy)-4-[[5-(2-naphthalenyl)pentyl]amino]-3-[[5-(2-naphthalenyl)pentyl]oxy]-4-oxo-, 1,1-dimethylethyl ester, (2R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

7

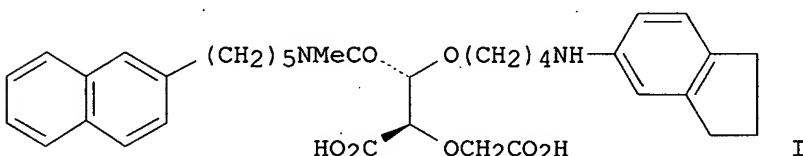
THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 15 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1998:485033 HCPLUS
 DOCUMENT NUMBER: 129:108913
 TITLE: Preparation of tartaric acid derivatives as squalene synthetase inhibitors
 INVENTOR(S): Usui, Hiroyuki; Kagechika, Katsuji; Nagashima, Hajime
 PATENT ASSIGNEE(S): Daiichi Pharmaceutical Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 281 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9829380 | A1 | 19980709 | WO 1997-JP4879 | 19971226 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2275603 | A1 | 19980709 | CA 1997-2275603 | 19971226 |
| AU 9853411 | A | 19980731 | AU 1998-53411 | 19971226 |
| EP 949238 | A1 | 19991013 | EP 1997-950426 | 19971226 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| CN 1241994 | A | 20000119 | CN 1997-181034 | 19971226 |
| BR 9714087 | A | 20000509 | BR 1997-14087 | 19971226 |
| NO 9903171 | A | 19990825 | NO 1999-3171 | 19990625 |
| PRIORITY APPLN. INFO.: | | | JP 1996-350673 | A 19961227 |
| | | | WO 1997-JP4879 | W 19971226 |

OTHER SOURCE(S): MARPAT 129:108913

GI



AB Claimed are compds. represented by general formula Q1-A1-Y1COCH(O-A2-Q2)CH(X1)O-A3-Q3 [X1 = optionally esterified CO2H, tetrazol-5-yl, SO3H, PO3H2; Y1 = a single bond, O, NH, N(OH), (un)substituted hydrocarbylimino; at least one of A1, A2 and A3 = R2-a1-R3-a2-; wherein R2 = a divalent C2-12 hydrocarbon group; R3 = a single bond, divalent C2-12 hydrocarbon group; a1, a2 = a single bond, S, SO, SO2, SO2NH, O, NH, N(OH), (un)substituted hydrocarbylimino, (un)substituted CONH2, CO, SiR6R7 (wherein R6, R7 = optionally substituted hydrocarbyl); and → represents the bond to Q1, Q2 or Q3; while the remainder(s) of A1, A2, and

A2 = R8-a3-R9-a4; wherein R8, R9 a single bond, divalent C2-12 hydrocarbon group; a3, a4 = a group listed in a1 and a2; and \rightarrow represents the bond to Q1, Q2 or Q3; and at least one of Q1, Q2 and Q3 = (un)substituted cyclic hydrocarbyl or heterocyclyl, while the remainder(s) = hydrogen, optionally esterified CO₂H, (un)substituted hydrocarbyl or heterocyclyl or salts thereof and drugs containing the same as the active ingredient. Because of having potent squalene synthetase inhibitory effects, these compds. are useful as remedies or preventives for hypercholesterolemia, hyperlipidemia, and arteriosclerosis. The title compound (I) (preparation given) showed IC₅₀ of 0.019 + 10⁻⁶M for inhibiting cholesterol in rat liver cells.

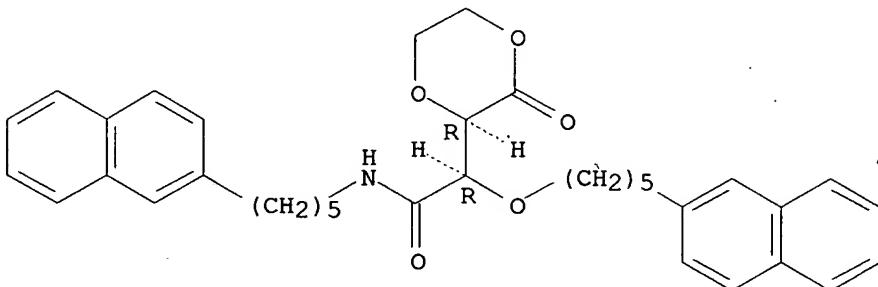
IT 210053-85-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tartaric acid derivs. as squalene synthetase inhibitors for treatment of hypercholesterolemia, hyperlipidemia, and arteriosclerosis)

RN 210053-85-3 HCPLUS

CN 1,4-Dioxane-2-acetamide, N-[5-(2-naphthalenyl)pentyl]- α -[[5-(2-naphthalenyl)pentyl]oxy]-3-oxo-, (2R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



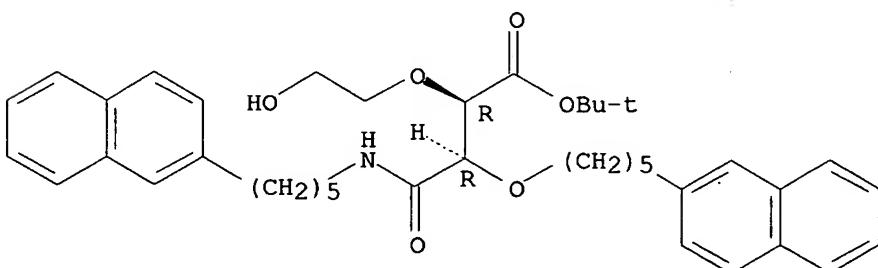
IT 210055-01-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of tartaric acid derivs. as squalene synthetase inhibitors for treatment of hypercholesterolemia, hyperlipidemia, and arteriosclerosis)

RN 210055-01-9 HCPLUS

CN Butanoic acid, 2-(2-hydroxyethoxy)-4-[[5-(2-naphthalenyl)pentyl]amino]-3-[[5-(2-naphthalenyl)pentyl]oxy]-4-oxo-, 1,1-dimethylethyl ester, (2R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

14

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS

L12 ANSWER 16 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1998:373030 HCPLUS
 DOCUMENT NUMBER: 129:180091
 TITLE: Polylactones. Part 42. Zn L-lactate-catalyzed
 polymerizations of 1,4-dioxan-2-one
 AUTHOR(S): Kricheldorf, H. R.; Damrau, Dirk-Olaf
 CORPORATE SOURCE: Institut Technische Makromolekulare Chemie,
 Universitaet Hamburg, Hamburg, D-20146, Germany
 SOURCE: Macromolecular Chemistry and Physics (1998), 199(6),
 1089-1097
 CODEN: MCHPES; ISSN: 1022-1352
 PUBLISHER: Huethig & Wepf Verlag
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB 1,4-Dioxan-2-one (DOXA) was polymerized by means of Zn L-lactate (ZnLac2) as catalyst in bulk. Upon systematic variation of the temperature, the reaction time, and the monomer/catalyst (M/C) mole ratio the highest mol. wts. were obtained at 100° and M/C ratios between 2000-4000. However, long reaction times (8-14 days) were required to obtain optimum results. ZnCl2 proved to be a somewhat less reactive catalyst, whereas ZnBr2 proved to be as efficient as ZnLac2. Addition of benzyl alc. as a coinitiator at a fixed DOXA/ZnLac2 ratio allowed a systematic control of the mol. weight. Furthermore the formation of benzyl ester end-groups was detected. Moreover, ZnLac2 allows the incorporation of various bioactive alcs. or phenols (e.g. testosterone, stigmasterol, ergocalciferol, cortisone, α -tocopherol) in the form of ester end-groups. Finally several properties of polydioxanone are reported and discussed, such as solubilities, IR, 1H NMR, and 13C NMR spectroscopic data, and thermogravimetric anal.

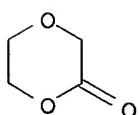
IT 29223-92-5DP, 1,4-Dioxan-2-one homopolymer, esters
 210906-29-9P 210906-33-5P 210906-38-0P
 210906-44-8P 210993-89-8P 210993-90-1P
 210993-91-2P 210993-92-3P 210993-93-4P
 211450-23-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (polymerization of dioxanone in presence of nontoxic zinc lactate catalyst
 and
 bioactive alcs. or phenols)

RN 29223-92-5 HCPLUS
 CN 1,4-Dioxan-2-one, homopolymer (9CI) (CA INDEX NAME)

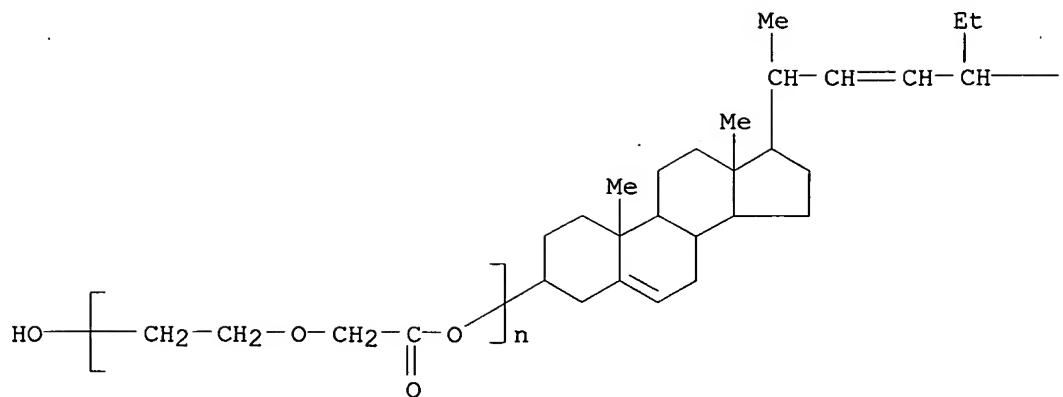
CM 1

CRN 3041-16-5
 CMF C4 H6 O3



RN 210906-29-9 HCPLUS
 CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl], α -(3 β ,22E)-stigmasta-5,22-dien-3-yl- ω -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

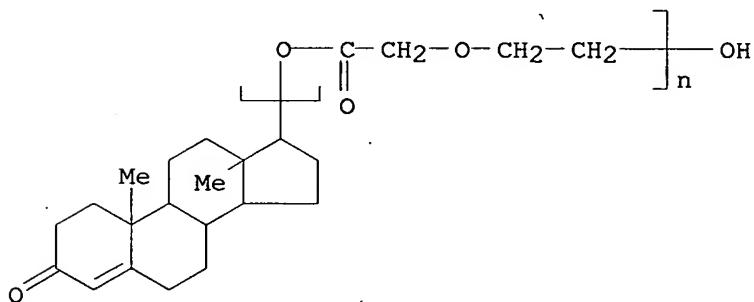


PAGE 1-B

— Pr-i

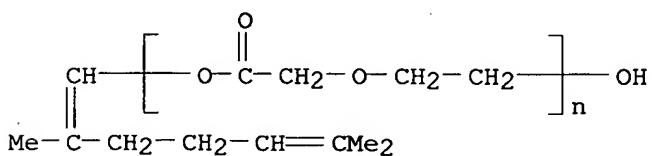
RN 210906-33-5 HCPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl], α -[(17 β)-3-oxoandrost-4-en-17-yl]- ω -hydroxy- (9CI) (CA INDEX NAME)



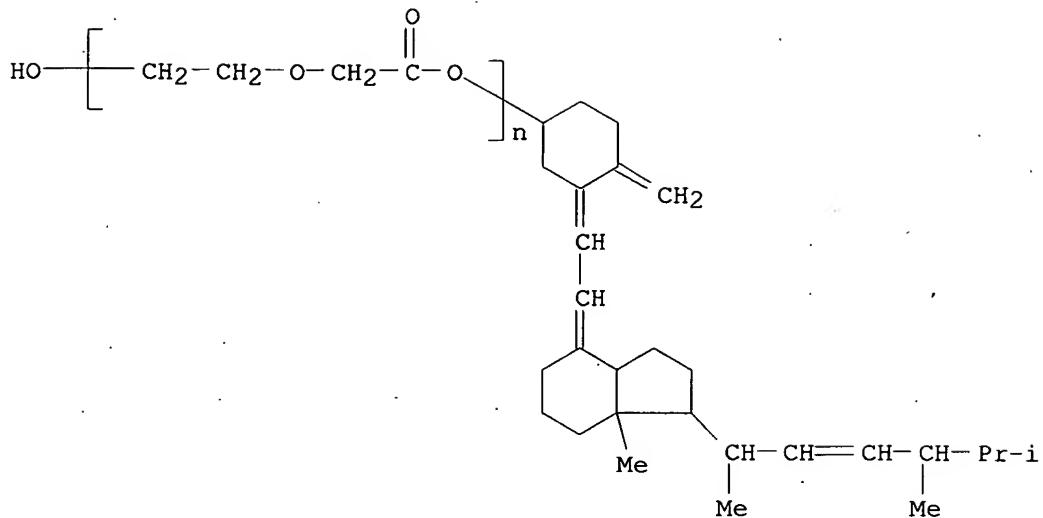
RN 210906-38-0 HCPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl], α -[(1E)-2,6-dimethyl-1,5-heptadienyl]- ω -hydroxy- (9CI) (CA INDEX NAME)



RN 210906-44-8 HCPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl], α -(3 β ,5 Z ,7 E ,22 E ,24 R)-9,10-secoergosta-5,7,10(19),22-tetraen-3-yl- ω -hydroxy- (9CI) (CA INDEX NAME)



RN 210993-89-8 HCAPLUS

CN Stigmasta-5,22-dien-3-ol, (3 β ,22E)-, polymer with 1,4-dioxan-2-one (9CI) (CA INDEX NAME)

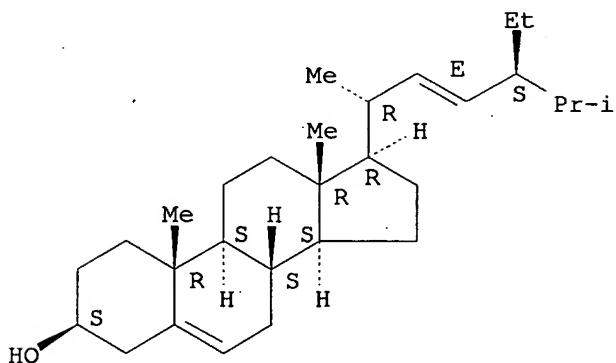
CM 1

CRN 83-48-7

CMF C29 H48 O

Absolute stereochemistry.

Double bond geometry as shown.



CM 2

CRN 29223-92-5

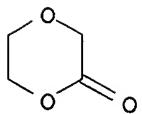
CMF (C4 H6 O3)x

CCI PMS

CM 3

CRN 3041-16-5

CMF C4 H6 O3



RN 210993-90-1 HCPLUS

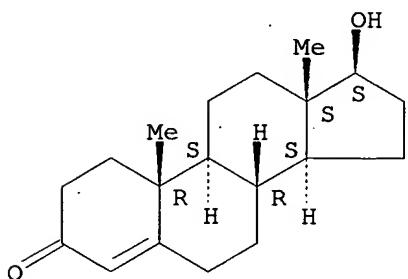
CN Androst-4-en-3-one, 17-hydroxy-, (17 β)-, polymer with
1,4-dioxan-2-one (9CI) (CA INDEX NAME)

CM 1

CRN 58-22-0

CMF C19 H28 O2

Absolute stereochemistry. Rotation (+).



CM 2

CRN 29223-92-5

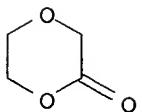
CMF (C4 H6 O3)x

CCI PMS

CM 3

CRN 3041-16-5

CMF C4 H6 O3



RN 210993-91-2 HCPLUS

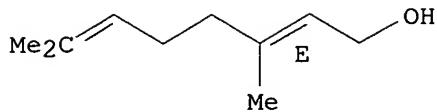
CN 1,4-Dioxan-2-one, homopolymer, (2E)-3,7-dimethyl-2,6-octadienyl ester
(9CI) (CA INDEX NAME)

CM 1

CRN 106-24-1

CMF C10 H18 O

Double bond geometry as shown.

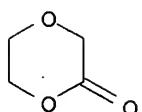


CM 2

CRN 29223-92-5
 CMF (C₄ H₆ O₃)_x
 CCI PMS

CM 3

CRN 3041-16-5
 CMF C₄ H₆ O₃



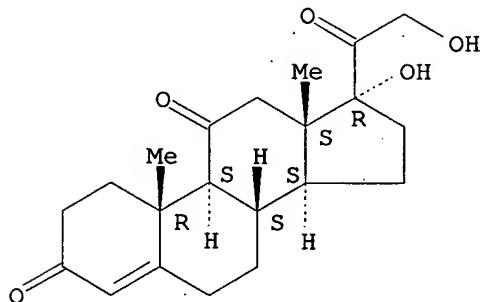
RN 210993-92-3 HCPLUS

CN Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy-, polymer with
 1,4-dioxan-2-one (9CI) (CA INDEX NAME)

CM 1

CRN 53-06-5
 CMF C₂₁ H₂₈ O₅

Absolute stereochemistry.

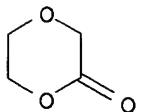


CM 2

CRN 29223-92-5
 CMF (C₄ H₆ O₃)_x
 CCI PMS

CM 3

CRN 3041-16-5
 CMF C₄ H₆ O₃



RN 210993-93-4 HCPLUS

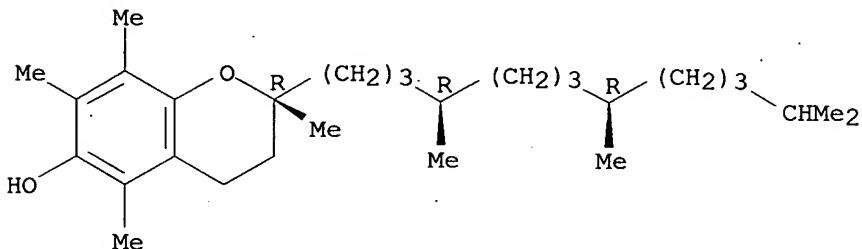
CN 1,4-Dioxan-2-one, homopolymer, (2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl ester (9CI) (CA INDEX NAME)

CM 1

CRN 59-02-9

CMF C29 H50 O2

Absolute stereochemistry.



CM 2

CRN 29223-92-5

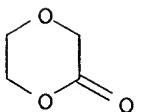
CMF (C4 H6 O3)x

CCI PMS

CM 3

CRN 3041-16-5

CMF C4 H6 O3



RN 211450-23-6 HCPLUS

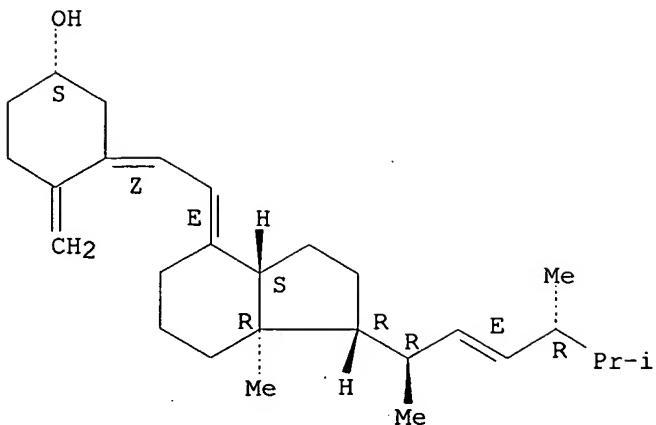
CN 1,4-Dioxan-2-one, homopolymer, (3β,5Z,7E,22E)-9,10-secoergosta-5,7,10(19),22-tetraen-3-yl ester (9CI) (CA INDEX NAME)

CM 1

CRN 50-14-6

CMF C28 H44 O

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.

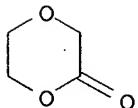


CM 2

CRN 29223-92-5
 CMF (C₄ H₆ O₃)_x
 CCI PMS

CM 3

CRN 3041-16-5
 CMF C₄ H₆ O₃



L12 ANSWER 17 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:725354 HCAPLUS

DOCUMENT NUMBER: 126:19445

TITLE: Bioabsorbable branched polymers containing units derived from dioxanone for manufacturing medical/surgical devices

INVENTOR(S): Bennett, Steven L.; Jiang, Ying; Gruskin, Elliott A.; Connolly, Kevin M.

PATENT ASSIGNEE(S): United States Surgical Corporation, USA

SOURCE: U.S., 8 pp., Cont.-in-part of U.S. Ser. No. 278,898.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 5578662 | A | 19961126 | US 1995-477098 | 19950607 |
| CA 2153867 | A1 | 19960123 | CA 1995-2153867 | 19950713 |
| US 6207767 | B1 | 20010327 | US 1997-979009 | 19971126 |
| US 6339130 | B1 | 20020115 | US 1999-282724 | 19990331 |
| US 2002032298 | A1 | 20020314 | US 2001-934639 | 20010822 |
| US 2004058164 | A1 | 20040325 | US 2003-630945 | 20030730 |
| US 2006014023 | A9 | 20060119 | | |

| | | | | |
|------------------------|----|----------|----------------|-------------|
| US 7097907 | B2 | 20060829 | US 2006-511133 | 20060828 |
| US 2006293406 | A1 | 20061228 | US 1994-278898 | A2 19940722 |
| PRIORITY APPLN. INFO.: | | | US 1995-477098 | A2 19950607 |
| | | | US 1996-733683 | B1 19961017 |
| | | | US 1999-282724 | A1 19990331 |
| | | | US 2001-934639 | A1 20010822 |
| | | | US 2003-630945 | A3 20030730 |

AB Star polymers of soft segment-forming monomers such as alkylene oxide or carbonate or dioxanone are useful in forming surgical devices for example, as fiber coatings, surgical adhesives or bone putty, or tissue growth substrate. The star polymers can be end-capped with lysine isocyanate, mixed with a filler and/or cross-linked.

IT 184483-38-3P

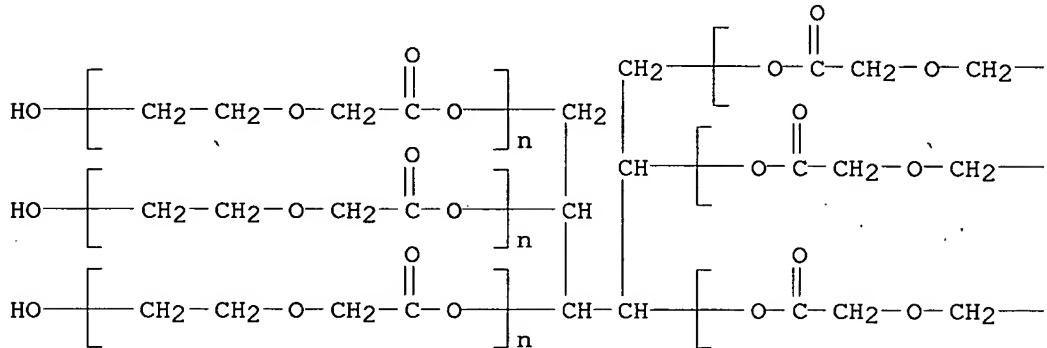
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(bioabsorbable branched polymers containing units derived from dioxanone for manufacturing medical/surgical devices)

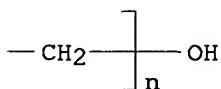
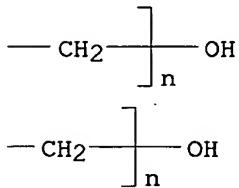
RN 184483-38-3 HCAPLUS

CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl], α -hydro- ω -hydroxy-, ether with D-mannitol (6:1) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 184483-40-7DP, reaction product with diethylethanolamine
184483-40-7P 184483-41-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);

USES (Uses)

(star-; bioabsorbable branched polymers containing units derived from dioxanone for manufacturing medical/surgical devices)

RN 184483-40-7 HCPLUS

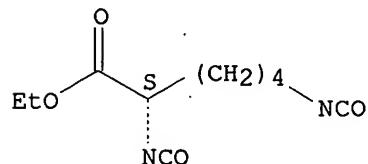
CN Hexanoic acid, 2,6-diisocyanato-, ethyl ester, (S)-, polymer with 1,4-dioxan-2-one and 2-oxepanone, block (9CI) (CA INDEX NAME)

CM 1

CRN 45172-15-4

CMF C10 H14 N2 O4

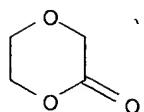
Absolute stereochemistry.



CM 2

CRN 3041-16-5

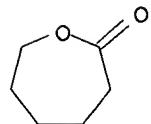
CMF C4 H6 O3



CM 3

CRN 502-44-3

CMF C6 H10 O2



RN 184483-40-7 HCPLUS

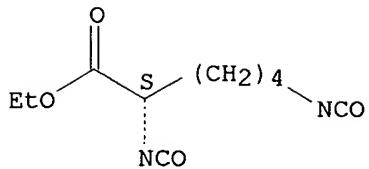
CN Hexanoic acid, 2,6-diisocyanato-, ethyl ester, (S)-, polymer with 1,4-dioxan-2-one and 2-oxepanone, block (9CI) (CA INDEX NAME)

CM 1

CRN 45172-15-4

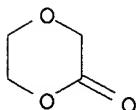
CMF C10 H14 N2 O4

Absolute stereochemistry.



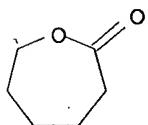
CM 2

CRN 3041-16-5
CMF C4 H6 O3



CM 3

CRN 502-44-3
CMF C6 H10 O2

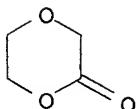


RN 184483-41-8 HCPLUS

CN 2-Oxepanone, polymer with 1,6-diisocyanatohexane and 1,4-dioxan-2-one,
block (9CI) (CA INDEX NAME)

CM 1

CRN 3041-16-5
CMF C4 H6 O3



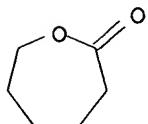
CM 2

CRN 822-06-0
CMF C8 H12 N2 O2

OCN- (CH₂)₆- NCO

CM 3

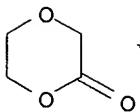
CRN 502-44-3
CMF C6 H10 O2



IT 41706-83-6P, Glycolide-p-dioxanone copolymer 184483-39-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(star; bioabsorbable branched polymers containing units derived from dioxanone for manufacturing medical/surgical devices)
RN 41706-83-6 HCPLUS
CN 1,4-Dioxane-2,5-dione, polymer with 1,4-dioxan-2-one (9CI) (CA INDEX NAME)

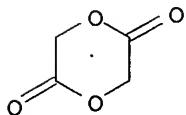
CM 1

CRN 3041-16-5
CMF C4 H6 O3

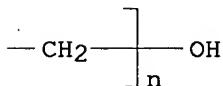
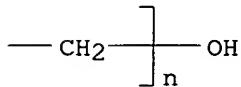
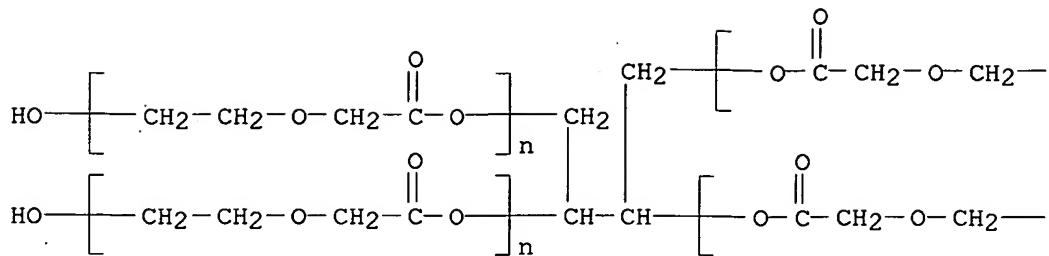


CM 2

CRN 502-97-6
CMF C4 H4 O4



RN 184483-39-4 HCPLUS
CN Poly[oxy(1-oxo-1,2-ethanediyl)oxy-1,2-ethanediyl],
 $\alpha,\alpha',\alpha'',\alpha'''-1,2,3,4-$
butanetetrayltetrakis[ω -hydroxy-, (R*,R*)- (9CI) (CA INDEX NAME)



L12 ANSWER 18 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1995:994873 HCAPLUS
 DOCUMENT NUMBER: 124:117978
 TITLE: Preparation of L-N6-(1-iminoethyl)lysine derivatives useful as nitric oxide synthase inhibitors
 INVENTOR(S): Hallinan, E. Ann; Tjoeng, Foe S.; Fok, Kam F.; Hagen, Timothy J.; Toth, Mihaly V.; Tsymbalov, Sofya; Pitzele, Barnett S.
 PATENT ASSIGNEE(S): G.D. Searle and Co., USA
 SOURCE: PCT Int. Appl., 106 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9524382 | A1 | 19950914 | WO 1995-US2669 | 19950308 |
| W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2184691 | A1 | 19950914 | CA 1995-2184691 | 19950308 |
| CA 2184691 | C | 20060221 | | |
| AU 9521156 | A | 19950925 | AU 1995-21156 | 19950308 |
| EP 749418 | A1 | 19961227 | EP 1995-913969 | 19950308 |
| EP 749418 | B1 | 20000830 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| AT 195933 | T | 20000915 | AT 1995-913969 | 19950308 |
| ES 2151055 | T3 | 20001216 | ES 1995-913969 | 19950308 |
| PT 749418 | T | 20010131 | PT 1995-913969 | 19950308 |
| US 6143790 | A | 20001107 | US 1996-702695 | 19960906 |

GR 3034576
PRIORITY APPLN. INFO.:

T3 20010131

GR 2000-402265

US 1994-209094

WO 1995-US2669

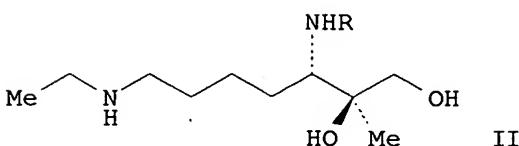
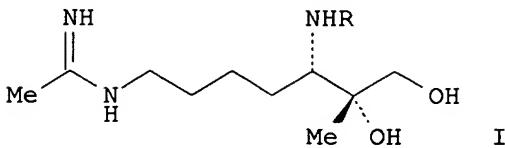
20001006

A2 19940310

W 19950308

OTHER SOURCE(S):
GI

MARPAT 124:117978



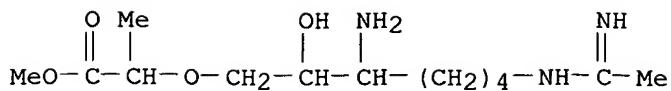
AB Novel amino glycol derivs. of L-N6-(1-iminoethyl)lysine represented by the general formula YC(:NR4)NR3XCH(NR1R2)-A-B [Y = H, each (un)substituted alkyl, alkenyl, alkynyl, aromatic hydrocarbyl, alicyclic hydrocarbyl, NH₂, or heterocyclyl containing 1-4 heteroatoms selected from O, N, and S; X = alkyl, alkenyl, alkynyl, aromatic hydrocarbyl, (CH₂)_mQ(CH₂)_n (wherein m = 1-3, n = 1-3; Q = S, S(O), SO₂, O; CO, etc.); R₁ - R₄ = H, alkyl; A = CO, each (un)substituted alkyl, alkenyl, alkynyl, alicyclic hydrocarbyl, or heterocyclyl containing 1-4 heteroatoms selected from O, N, and S; B = H, each (un)substituted alkyl, alkenyl, alkynyl, alkoxy, OH, alkoxy carbonyl, alkylaryloxy, thiol, alkylthio, alkylarylthio, arylthio, alkylsulfinyl, alkylarylsulfinyl, arylsulfinyl, alkylsulfonyl, arylsulfonyl, alkylsulfonyl, alkylarylsulfonyl, arylsulfonyl, aromatic or alicyclic hydrocarbyl, or heterocyclyl containing 1-4 heteroatoms selected from O, N, and S; or B = CO₂R₅, CONR₅R₆, P(O)(OR₅)OR₆, NHOH, N(OH)CO NR₅R₆, NR₅C(O)NR₆R₇, NR₅CON(OH)R₆, CONHOH; where R₅, R₆, R₇ = H, each (un)substituted alkyl, aromatic or aliphatic hydrocarbyl] are prepared. Thus, Z-Lys(Boc)-N(OMe)Me and Me₂NCH₂CH₂NMe₂ were dissolved in THF, treated a 1.4 M solution of MeLi in Et₂O at -78°, and stirred at the same temperature for 3 h to give (S)-BocNH(CH₂)₄CH(NHZ)COMe, which was condensed with methyltrifluorophosphonium bromide in the presence of potassium hexamethyldisilazide in PhMe at -20° for 1.5 h to give (S)-BocNH(CH₂)₄CH(NHZ)C(:CH₂)Me. The latter compound was hydroxylated by OsO₄ and N-methylmorpholine in a mixture of acetone, H₂O, and Me₃COH to give the diol BocNH(CH₂)₄CH(NHZ)CMe(OH)CH₂OH which was deprotected with 4 N HCl in dioxane to HCl·H₂N(CH₂)₄CH(NHZ)CMe(OH)CH₂OH and condensed with Me acetimidate hydrochloride in DMF containing Et₃N to give, after reversed phase column chromatog. using a YMC AQ-363-10P ODS column, the diastereoisomers (I and II; R = Z). The latter compds. were reduced under catalytic hydrogenation conditions using Pd-C at 5 psi H to give the title N-(iminoethyl)lysinol compds. I and II (R = H), which showed IC₅₀ of 9.3 and 187 μM, resp., against human inducible nitric oxide synthase.

IT 172832-99-4P 172833-00-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-(iminoethyl)lysinol derivs. as nitric oxide synthase inhibitors)

RN 172832-99-4 HCPLUS

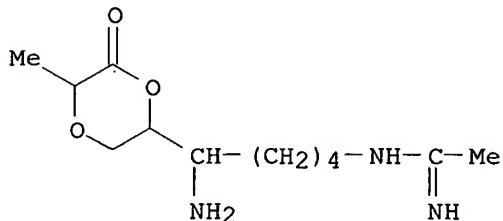
CN Propanoic acid, 2-[[3-amino-2-hydroxy-7-[(1-iminoethyl)amino]heptyl]oxy]-, methyl ester, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 172833-00-0 HCAPLUS

CN Ethanimidamide, N-[5-amino-5-(5-methyl-6-oxo-1,4-dioxan-2-yl)pentyl]-, dihydrochloride (9CI) (CA INDEX NAME)



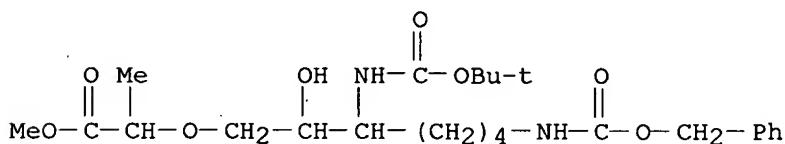
● 2 HCl

IT 172833-79-3P 172833-80-6P 172833-81-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-(iminoethyl)lysinol derivs. as nitric oxide synthase inhibitors)

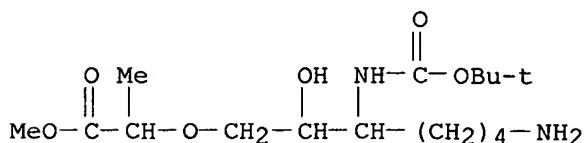
RN 172833-79-3 HCAPLUS

CN Propanoic acid, 2-[3-[(1,1-dimethylethoxy)carbonyl]amino]-2-hydroxy-3-[4-[(phenylmethoxy)carbonyl]amino]butyl]propoxy-, methyl ester (9CI) (CA INDEX NAME)



RN 172833-80-6 HCAPLUS

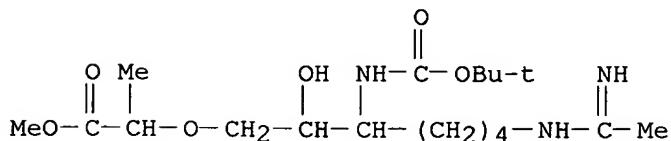
CN Propanoic acid, 2-[3-(4-aminobutyl)-3-[([(1,1-dimethylethoxy)carbonyl]amino]-2-hydroxypropoxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 172833-81-7 HCAPLUS

CN Propanoic acid, 2-[3-[(1,1-dimethylethoxy)carbonyl]amino]-2-hydroxy-3-[4-

[(1-iminoethyl)amino]butyl]propoxy]-, methyl ester (9CI) (CA INDEX NAME)



L12 ANSWER 19 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1994:297617 HCAPLUS

DOCUMENT NUMBER: 120:297617

TITLE: Diastereoselective alkylations of tert-butyl glycolate etherenolates

AUTHOR(S): Wittenberger, Steven J.; Boyd, Steven A.; Baker, William R.

CORPORATE SOURCE: Pharm. Prod. Div., Abbott Lab., Abbott Park, IL, 60064, USA

SOURCE: Synlett (1993), (10), 795-7

CODEN: SYNLES; ISSN: 0936-5214

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 120:297617

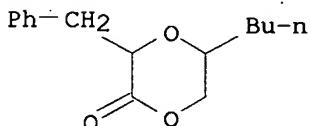
AB Lithium enolates derived from tert-Bu glycolate ethers $\text{Me}_3\text{CO}_2\text{CCH}_2\text{OCHRBu}$ [R = 2-furyl, CH_2OH , $\text{CH}_2\text{OSiEt}_3$] possessing O-containing functional groups which are capable of chelating the Li counter ion were alkylated with PhCH_2Br . Diastereoselectively in the alkylation reaction ranged from 1:1 to 1:10. A bicyclo[3.3.0]enolate structure is proposed to account for these observations.

IT 154994-35-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction of)

RN 154994-35-1 HCAPLUS

CN 1,4-Dioxan-2-one, 5-butyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

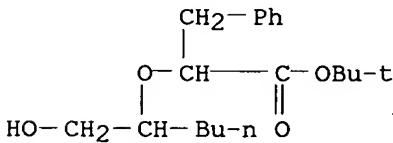


IT 154994-33-9P

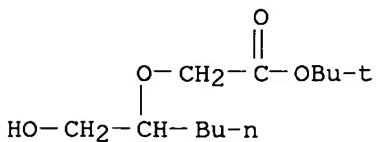
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and silylation and cyclization of)

RN 154994-33-9 HCAPLUS

CN Benzenepropanoic acid, α -[(1-(hydroxymethyl)pentyl)oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

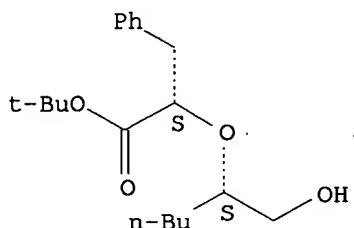


IT 154994-21-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and stereoselective alkylation of)
 RN 154994-21-5 HCPLUS
 CN Acetic acid, [[1-(hydroxymethyl)pentyl]oxy]-, 1,1-dimethylethyl ester
 (9CI) (CA INDEX NAME)



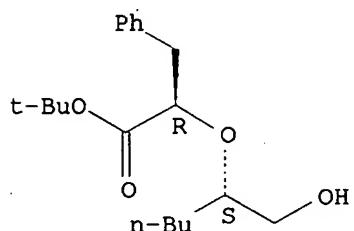
IT 154994-24-8P 154994-27-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 154994-24-8 HCPLUS
 CN Benzenepropanoic acid, α -[[1-(hydroxymethyl)pentyl]oxy]-,
 1,1-dimethylethyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 154994-27-1 HCPLUS
 CN Benzenepropanoic acid, α -[[1-(hydroxymethyl)pentyl]oxy]-,
 1,1-dimethylethyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 20 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1994:217057 HCPLUS
 DOCUMENT NUMBER: 120:217057
 TITLE: Total synthesis of ionophore antibiotic X-14547 A
 (indanomycin)
 AUTHOR(S): Burke, Steven D.; Piscopio, Anthony D.; Kort, Michael
 E.; Matulenko, Mark A.; Parker, Marshall H.;
 Armistead, David M.; Shankaran, K.
 CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin, Madison, WI, 53706, USA
 SOURCE: Journal of Organic Chemistry (1994), 59(2), 332-47

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 120:217057

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A convergent, enantioselective total synthesis of ionophore antibiotic X-14547A (indanomycin, I) is described. The dioxanone-to-dihydropyran variant of the lactonic Ireland-Claisen rearrangement establishes the dihydropyran nucleus of the left wing fragment. Elaboration to the target synthon utilizes a new methodol. for the preparation of stereodefined vinylsilanes II ($R = CEt:CHSiMe_3$) from II [$R = C(:CH_2)CH_2OH$] via net SN_2' coupling of $[\alpha-(mesyloxy)allyl]silanes$ with Grignard reagents catalyzed by CuCN. Salient features in the construction of the right wing subunit include a modification of the Noyori three-component coupling procedure to give cyclopentanone III and the application of a retro hetero Diels-Alder/intramol. Diels-Alder (mock Claisen) process to oxabicyclonanone IV to give indanone V. Palladium-mediated cross coupling of left wing and right wing synthons using Stille's method tolerates a free carboxylic acid and an unprotected acyl pyrrole, affording I directly in its natural absolute configuration.

IT 153868-88-3P 153868-90-7P 154001-93-1P

RL: PREP (Preparation)

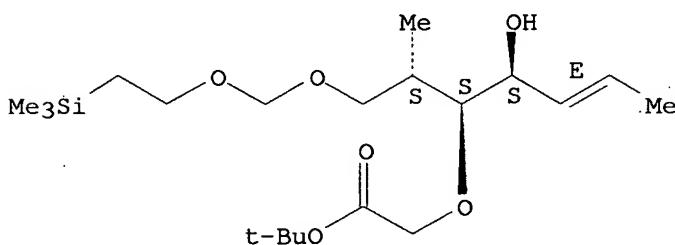
(intermediate in total synthesis of indanomycin)

RN 153868-88-3 HCPLUS

CN 5,7,11-Trioxa-2-silatridecan-13-oic acid, 10-(1-hydroxy-2-butenyl)-2,2,9-trimethyl-, 1,1-dimethylethyl ester, [9S-[9R*,10R*(1R*,2E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.

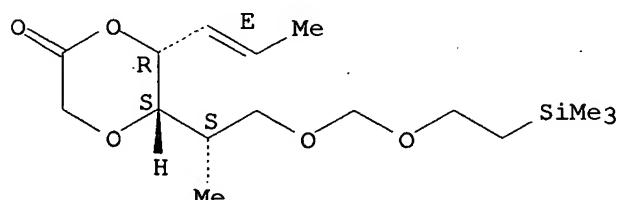


RN 153868-90-7 HCPLUS

CN 1,4-Dioxan-2-one, 5-[1-methyl-2-[[2-(trimethylsilyl)ethoxy]methoxy]ethyl]-6-(1-propenyl)-, [5S-[5a(R*),6a(E)]]- (9CI) (CA INDEX NAME)

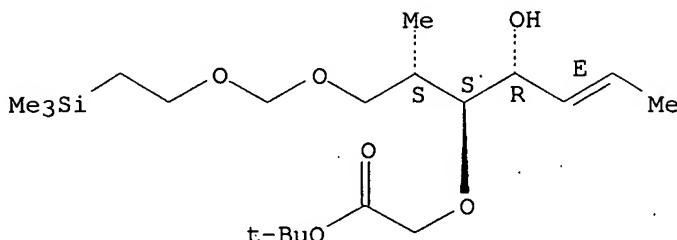
Absolute stereochemistry.

Double bond geometry as shown.



RN 154001-93-1 HCAPLUS
CN 5,7,11-Trioxa-2-silatridecan-13-oic acid, 10-(1-hydroxy-2-but enyl)-2,2,9-trimethyl-, 1,1-dimethylethyl ester, [9S-[9R*,10R*(1S*,2E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



L12 ANSWER 21 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:607719 HCAPLUS

DOCUMENT NUMBER: 115:207719

TITLE: Double dioxanone-to-dihydropyran reorganization.

AUTHOR(S): Burke, Steven D.; Lee, Kevin C.; Santafianos, Dinos

CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin, Madison, WI, 53706, USA

SOURCE: Tetrahedron Letters (1991), 32(32), 3957-60

DOCUMENT TYPE: CODEN: TELEAY; ISSN: 0040-4039

LANGUAGE: Journal

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Convergent, stereoselective construction of the lactate-derived bis(dioxanone) I and 2 concurrent [3,3] sigmatropic transformations resulted in the trienic bis(dihydropyran) II, a potential precursor for the C(1)-C(13) fragment of erythronolides A and B (III; R = OH, H resp.).

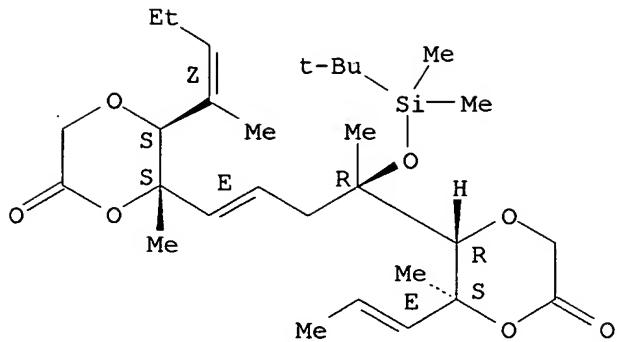
IT 136683-88-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and double sigmatropic rearrangement of, pyranylethylpyran from)

RN 136683-88-0 HCAPLUS

CN 1,4-Dioxan-2-one, 5-[1-[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-methyl-4-[2-methyl-3-(1-methyl-1-but enyl)-6-oxo-1,4-dioxan-2-yl]-3-but enyl]-6-methyl-6-(1-propenyl)-, [2S-[2 α [1S*[5S*,6R*(E)],3E],3 β (Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



IT 136683-89-1P 136779-57-2P

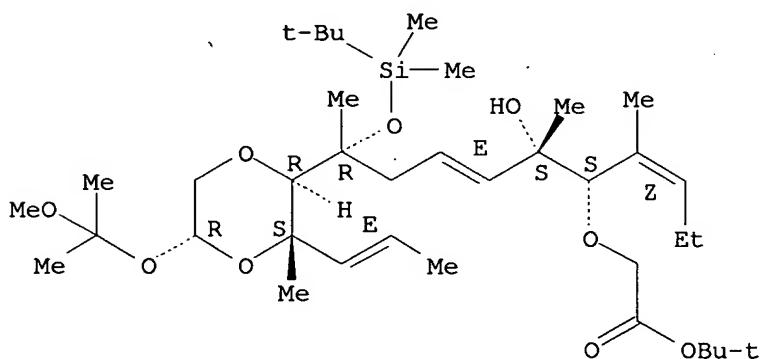
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, lactonization, and reduction of)

RN 136683-89-1 HCAPLUS

CN Acetic acid, [[6-[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxy-6-[5-(1-methoxy-1-methylethoxy)-3-methyl-3-(1-propenyl)-1,4-dioxan-2-yl]-2-methyl-1-(1-methyl-1-butenyl)-3-heptenyl]oxy]-, 1,1-dimethylethyl ester,
[2R-[2 α [1S*(Z),2S*,3E,6R*],3 β (E),5 β]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

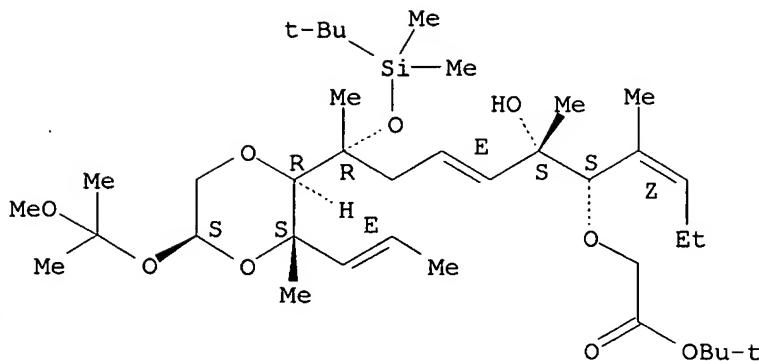


RN 136779-57-2 HCAPLUS

CN Acetic acid, [[6-[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-hydroxy-6-[5-(1-methoxy-1-methylethoxy)-3-methyl-3-(1-propenyl)-1,4-dioxan-2-yl]-2-methyl-1-(1-methyl-1-butenyl)-3-heptenyl]oxy]-, 1,1-dimethylethyl ester,
[2R-[2 α [1S*(Z),2S*,3E,6R*],3 β (E),5 α]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 136683-84-6P

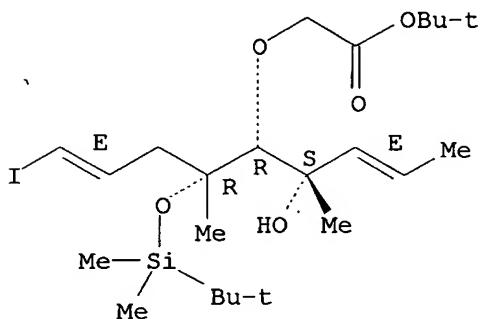
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, lactonization, reduction, and alkylation of, with Me propenyl ether)

RN 136683-84-6 HCPLUS

CN Acetic acid, [[1-[1-[[1,1-dimethylethyl]dimethylsilyl]oxy]-4-iodo-1-methyl-3-butenyl]-2-hydroxy-2-methyl-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [1R-[1R*(1R*,3E),2S*,3E]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



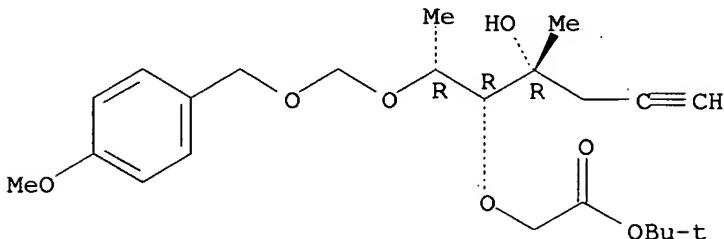
IT 136683-81-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, stannylation, and silylation of)

RN 136683-81-3 HCPLUS

CN Acetic acid, [[2-hydroxy-1-[1-[[4-methoxyphenyl)methoxy]methoxy]ethyl]-2-methyl-4-pentynyl]oxy]-, 1,1-dimethylethyl ester, [1R-[1R*(R*),2R*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 22 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:582935 HCAPLUS

DOCUMENT NUMBER: 115:182935

TITLE: Synthesis of a C(22) → C(34) halichondrin precursor via a double dioxanone-to-dihydropyran rearrangement

AUTHOR(S): Burke, Steven D.; Buchanan, John L.; Rovin, Joshua D.
CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin, Madison, WI, 53706, USA

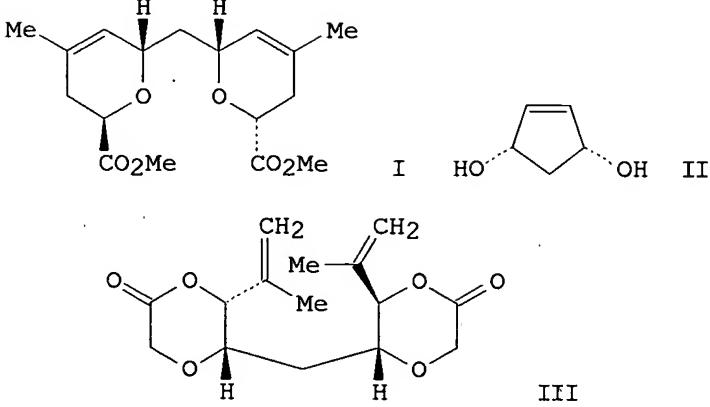
SOURCE: Tetrahedron Letters (1991), 32(32), 3961-4

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal

JOURNAL
LANGUAGE: English

ENGLISH



AB The C(22)-C(34) fragment (I) of halichondrins B and C was prepared in 9 steps starting from meso-cyclopentenediol II. A key step was the double [3,3] sigmatropic rearrangement of bis(dioxanone) III to give I.

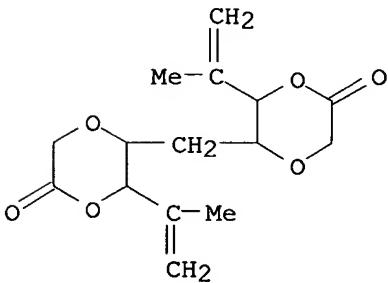
IT 136683-71-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and double sigmatropic rearrangement of, bis(dihydropyranyl)methane from)

RN 136683-71-1 HCPLUS

CN 1,4-Dioxan-2-one, 5,5'-methylenebis[6-(1-methylethenyl)-[5S-[5 α (5'S*,6'S*),6 α]]- (9CI) (CA INDEX NAME)



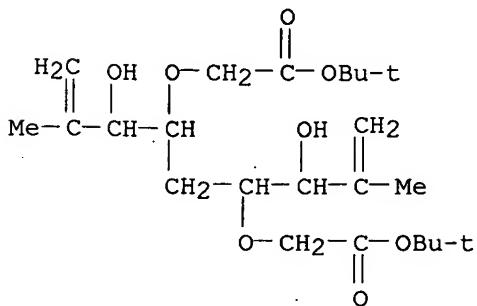
IT 136683-76-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

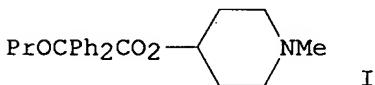
(preparation and intramol. cyclocondensation of, dioxanone from)

RN 136683-76-6 HCAPLUS

CN Acetic acid, 2,2'-[{[1,3-bis(1-hydroxy-2-methyl-2-propenyl)-1,3-propanediyl]bis(oxy)]bis-, bis(1,1-dimethylethyl) ester, [1R-[1R*(R*), 3S*(R*)]]- (9CI) (CA. INDEX NAME)



L12 ANSWER 23 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:417428 HCAPLUS
DOCUMENT NUMBER: 113:17428
TITLE: Pharmacokinetic studies of propiverine hydrochloride.
(2). Metabolism in rats after single oral
administration
AUTHOR(S): Yamamoto, Yoshio; Minami, Yoshinori; Yoshida,
Masahiko; Tsuda, Masuhiro; Uda, Kazuhiko; Shindo,
Takashi; Umeno, Yukihiko; Kawaguchi, Yasuro
CORPORATE SOURCE: Biol. Res. Lab., Taiho Pharm. Co. Ltd., Kawauchi,
771-01, Japan
SOURCE: Yakubutsu Dotai (1989), 4(5), 553-61
DOCUMENT TYPE: CODEN: YADOEL; ISSN: 0916-1139
LANGUAGE: Journal
GI: Japanese



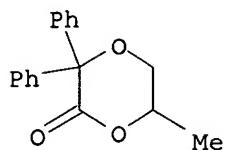
AB The biotransformation of propiverine hydrochloride [1-methyl-4-piperidyl diphenylpropoxyacetate hydrochloride, P-4] (I-HCl) was studied in rats after oral administration of P-4. The presence of nine metabolites of P-4 was found in the urine and the bile after oral administration; they were identified based on a 1H-NMR and mass spectra by direct comparison with authentic compds. Portal plasma concentration of unchanged drug after oral administration of 14C-P-4 was 4 .apprx. 16 times higher than in peripheral plasma, indicating the presence of the hepatic first pass effect. After oral administration of 14C-P-4, 1-methyl-4-piperidyl benzilate N-oxide was excreted mainly in the urine, whereas unidentified polar metabolites, benzilic acid, diphenyl-1-(2-hydroxy) propoxyacetic acid, 2,2-diphenyl-5-methyl-1, 4-dioxan-3-one and 1-methyl-4-piperidyl diphenyl-(2-carboxy) ethoxyacetate were excreted in the bile. Conjugates (glucuronide and sulfate) accounting for only 3 .apprx. 4% of the administered dose were detected in the urine and bile.

IT 111051-50-4 127842-32-4

RL: BIOL (Biological study)
(as propiverine metaboloid)

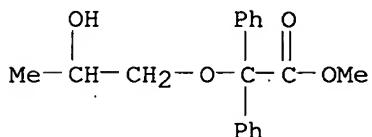
RN 111051-50-4 HCAPLUS

CN 1,4-Dioxan-2-one, 6-methyl-3,3-diphenyl- (9CI) (CA INDEX NAME)



RN 127842-32-4 HCAPLUS

CN Benzeneacetic acid, α -(2-hydroxypropoxy)- α -phenyl-, methyl ester (9CI) (CA INDEX NAME)



L12 ANSWER 24 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:478540 HCAPLUS

DOCUMENT NUMBER: 111:78540

TITLE: The synthesis of acyclonucleoside hydroxamic acids as inhibitors of ribonucleotide reductase

AUTHOR(S): Farr, Robert A.; Bey, Philippe; Sunkara, Prasad S.; Lippert, Bruce J.

CORPORATE SOURCE: Merrell Dow Res. Inst., Cincinnati, OH, 45215, USA

SOURCE: Journal of Medicinal Chemistry (1989), 32(8), 1879-85

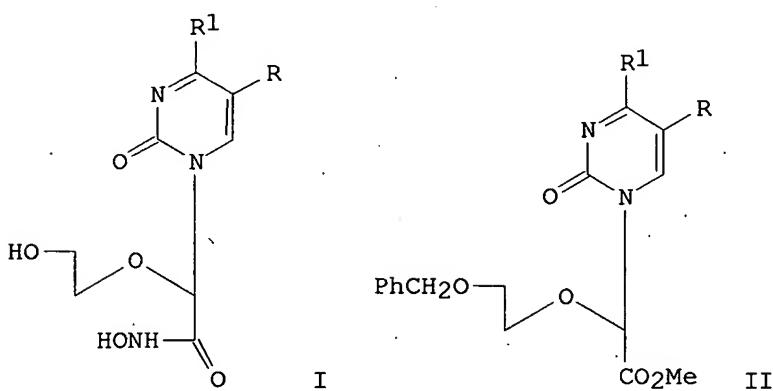
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 111:78540

GI



AB N-Hydroxy- α -(2-hydroxyethoxy)-1(2H)-pyrimidineacetamides I (R = H, F, R1 = OH; R = H, R1 = NH2) were synthesized as potential antitumor agents whose mechanism of action would involve inhibition of ribonucleoside diphosphate reductase (EC 1.17.4.1). The key intermediates acyclonucleoside esters II (R = H, F, R1 = OH; R = H, R1 = NHAc) were

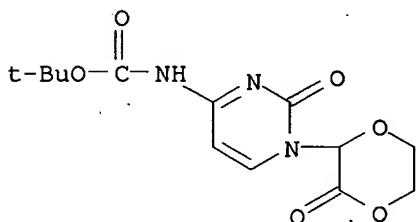
prepared by the SnCl₄ catalyzed reaction of Me chloro-[2-(phenylmethoxy)ethoxy]acetate with various silylated pyrimidines, generated in situ from the bases and bis(trimethylsilyl)acetamide. In vitro I were 3-10-fold less potent than hydroxyurea against calf thymus cytidine diphosphate (CDP) reductase. I (R = F, R₁ = OH) is nearly equipotent with hydroxyurea in inhibiting the growth of HeLa cells, while I (R = H, R₁ = OH) a much weaker inhibitor and I (R = H, R₁ = NH₂) is devoid of activity at 200 µg/mL.

IT 121653-89-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)

RN 121653-89-2 HCPLUS

CN Carbamic acid, [1,2-dihydro-2-oxo-1-(3-oxo-1,4-dioxan-2-yl)-4-pyrimidinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

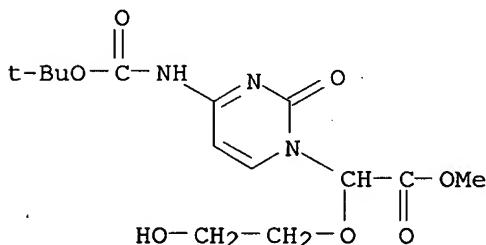


IT 121653-88-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and lactonization of)

RN 121653-88-1 HCPLUS

CN 1(2H)-Pyrimidineacetic acid, 4-[(1,1-dimethylethoxy)carbonyl]amino-α-(2-hydroxyethoxy)-2-oxo-, methyl ester (9CI) (CA INDEX NAME)

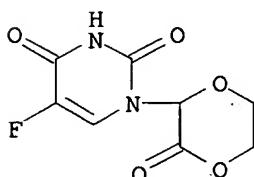


IT 121653-82-5P 121653-91-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with hydroxylamine)

RN 121653-82-5 HCPLUS

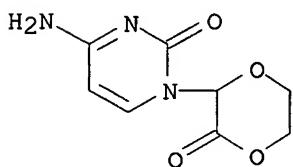
CN 2,4(1H,3H)-Pyrimidinedione, 5-fluoro-1-(3-oxo-1,4-dioxan-2-yl)- (9CI) (CA INDEX NAME)



RN 121653-91-6 HCPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-(3-oxo-1,4-dioxan-2-yl)-,
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

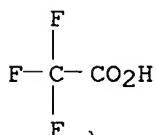
CM 1

CRN 121653-90-5
CMF C8 H9 N3 O4

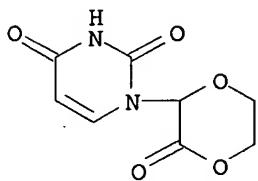


CM 2

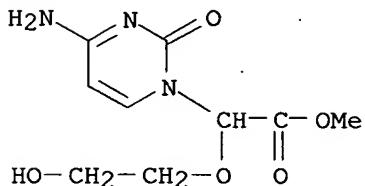
CRN 76-05-1
CMF C2 H F3 O2



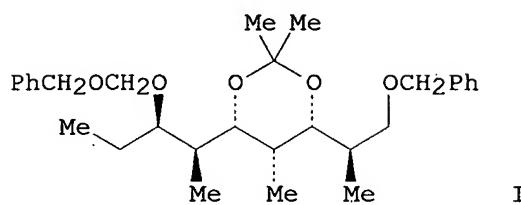
IT 121653-81-4P 121653-87-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 121653-81-4 HCPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-(3-oxo-1,4-dioxan-2-yl)- (9CI) (CA INDEX NAME)



RN 121653-87-0 HCPLUS
CN 1(2H)-Pyrimidineacetic acid, 4-amino- α -(2-hydroxyethoxy)-2-oxo-,
methyl ester (9CI) (CA INDEX NAME)



L12 ANSWER 25 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1988:406271 HCPLUS
 DOCUMENT NUMBER: 109:6271
 TITLE: An alternate route to the C(7)-C(13) subunit of erythronolide B via a hydroxyran template
 AUTHOR(S): Burke, Steven D.; Chandler, Arthur C., III; Nair, Mangalam S.; Campopiano, Onorato
 CORPORATE SOURCE: Dep. Chem., Univ. South Carolina, Columbia, SC, 29208, USA
 SOURCE: Tetrahedron Letters (1987), 28(36), 4147-8
 CODEN: TELEAY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 109:6271
 GI



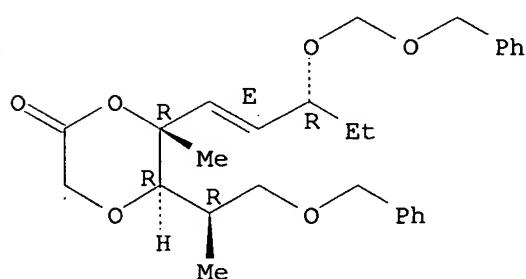
AB (R)-3-Benzyl-2-methylpropionaldehyde was converted to the erythronolide B C(7)-C(13) subunit I in 15% overall yield. Chelation-controlled carbonyl addns. and a dioxanone-to-dihydropyran Claisen rearrangement are key steps.

IT 114826-19-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and Claisen rearrangement of)

RN 114826-19-6 HCPLUS

CN 1,4-Dioxan-2-one, 6-methyl-5-[1-methyl-2-(phenylmethoxy)ethyl]-6-[3-[(phenylmethoxy)methoxy]-1-pentenyl]-, [5R-[5 α (R*), 6 β (1E, 3R*)]]- (9CI) (CA INDEX NAME)

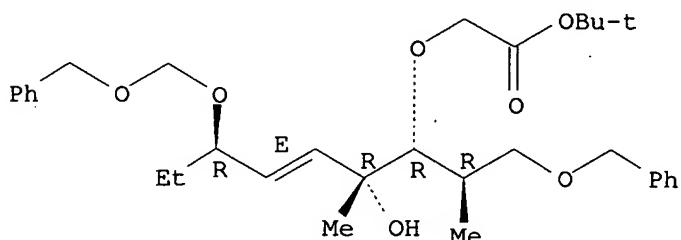
Absolute stereochemistry.
 Double bond geometry as shown.



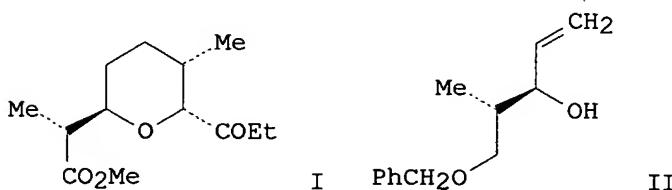
IT 114826-18-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and lactonization of)

RN 114826-18-5 HCAPLUS
CN Acetic acid, [[2-hydroxy-2-methyl-1-[1-methyl-2-(phenylmethoxy)ethyl]-5-[(phenylmethoxy)methoxy]-3-heptenyl]oxy]-, 1,1-dimethylethyl ester, [1R-[1R*(R*),2R*,3E,5R*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L12 ANSWER 26 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:119510 HCAPLUS
DOCUMENT NUMBER: 106:119510
TITLE: An enolate Claisen route to C-pyranosides. Development and application to an ionophore synthon
AUTHOR(S): Burke, Steven D.; Armistead, David M.; Schoenen, Frank J.; Fevig, John M.
CORPORATE SOURCE: Dep. Chem., Univ. South Carolina, Columbia, SC, 29208, USA
SOURCE: Tetrahedron (1986), 42(11), 2787-801
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 106:119510
GI



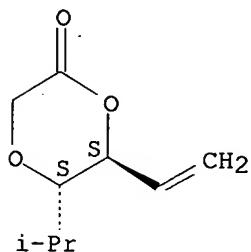
AB A new method for the stereoselective synthesis of dihydropyrans of various substitution patterns involves the Ireland ester enolate Claisen rearrangements of 6-alkenyl-1,4-dioxan-2-ones. The method was applied to an enantioselective synthesis of the left-wing tetrahydropyran portion I of the ionophore antibiotic indanomycin. The synthetic sequence proceeded in >29% overall yield in 12 steps from the allylic alc. II, thus underscoring its utility.

| | | | |
|----|--------------|-------------|-------------|
| IT | 92420-30-9P | 92420-31-0P | 92420-32-1P |
| | 92420-33-2P | 92420-34-3P | 92420-35-4P |
| | 92420-36-5P | 92420-37-6P | 92420-38-7P |
| | 92471-18-6P | 92471-19-7P | 96720-60-4P |
| | 107134-01-0P | | |

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and Claisen rearrangement of)

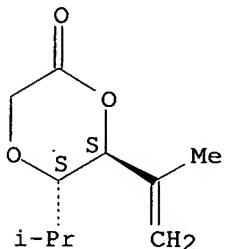
RN 92420-30-9 HCAPLUS
CN 1,4-Dioxan-2-one, 6-ethenyl-5-(1-methylethyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 92420-31-0 HCAPLUS
CN 1,4-Dioxan-2-one, 6-(1-methylethethyl)-5-(1-methylethyl)-, trans- (9CI) (CA INDEX NAME)

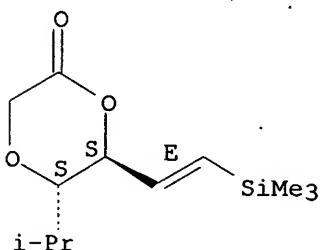
Relative stereochemistry.



RN 92420-32-1 HCAPLUS
CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-[2-(trimethylsilyl)ethenyl]-, [5 α , 6 β (E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

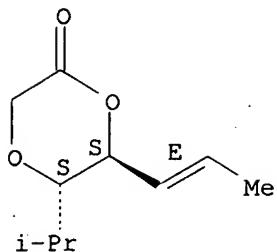
Double bond geometry as shown.



RN 92420-33-2 HCAPLUS
CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-, [5 α , 6 β (E)]- (9CI) (CA INDEX NAME)

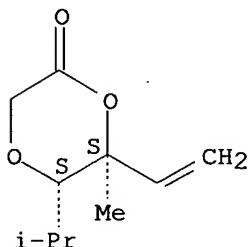
Relative stereochemistry.

Double bond geometry as shown.



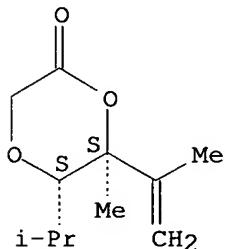
RN 92420-34-3 HCPLUS
 CN 1,4-Dioxan-2-one, 6-ethenyl-5-(1-methylethyl)-, *trans*- (9CI) (CA INDEX NAME)

Relative stereochemistry.



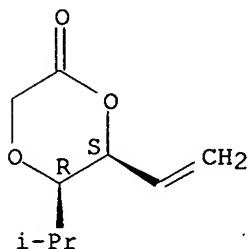
RN 92420-35-4 HCPLUS
 CN 1,4-Dioxan-2-one, 6-methyl-5-(1-methylethyl)-, *trans*- (9CI) (CA INDEX NAME)

Relative stereochemistry.



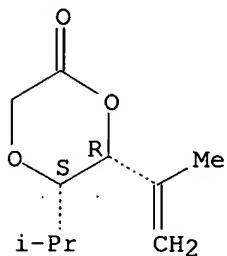
RN 92420-36-5 HCPLUS
 CN 1,4-Dioxan-2-one, 6-ethenyl-5-(1-methylethyl)-, *cis*- (9CI) (CA INDEX NAME)

Relative stereochemistry.



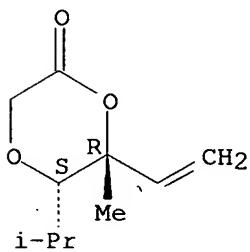
RN 92420-37-6 HCAPLUS
CN 1,4-Dioxan-2-one, 6-(1-methylethethyl)-5-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 92420-38-7 HCAPLUS
CN 1,4-Dioxan-2-one, 6-ethenyl-6-methyl-5-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

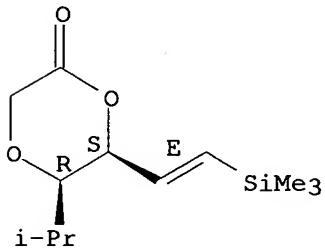
Relative stereochemistry.



RN 92471-18-6 HCAPLUS
CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-[2-(trimethylsilyl)ethenyl]-, [5 α ,6 α (E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

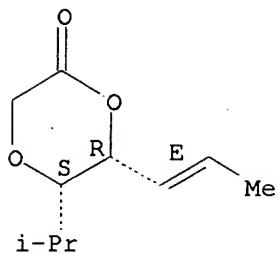
Double bond geometry as shown.



RN 92471-19-7 HCAPLUS
CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-, [5 α ,6 α (E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

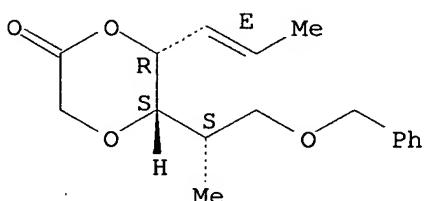


RN 96720-60-4 HCPLUS

CN 1,4-Dioxan-2-one, 5-[1-methyl-2-(phenylmethoxy)ethyl]-6-(1-propenyl)-, [5S-[5 α (R *), 6 α (E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

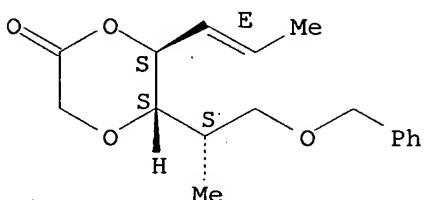


RN 107134-01-0 HCPLUS

CN 1,4-Dioxan-2-one, 5-[1-methyl-2-(phenylmethoxy)ethyl]-6-(1-propenyl)-, [5S-[5 α (R *), 6 β (E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

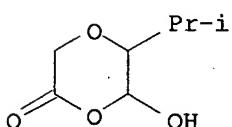


IT 92420-51-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and Grignard reactions of)

RN 92420-51-4 HCPLUS

CN 1,4-Dioxan-2-one, 6-hydroxy-5-(1-methylethyl)- (9CI) (CA INDEX NAME)



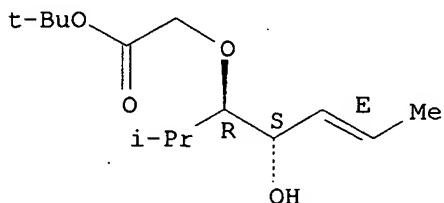
IT 92420-55-8P 92456-09-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)

RN 92420-55-8 HCPLUS

CN Acetic acid, [[2-hydroxy-1-(1-methylethyl)-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

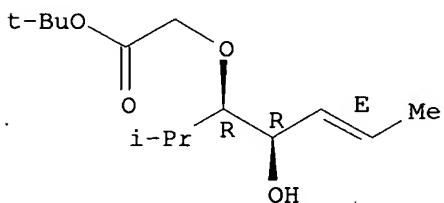
Relative stereochemistry.
Double bond geometry as shown.



RN 92456-09-2 HCPLUS

CN Acetic acid, [[2-hydroxy-1-(1-methylethyl)-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [R*,R*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



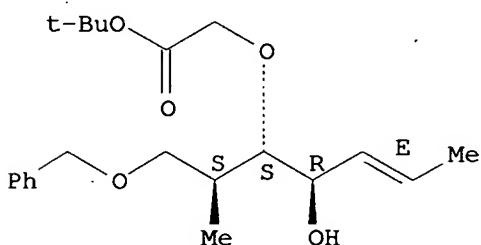
IT 96789-96-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and lactonization of)

RN 96789-96-7 HCPLUS

CN Acetic acid, [[2-hydroxy-1-[1-methyl-2-(phenylmethoxy)ethyl]-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [1S-[1R*(R*),2S*,3E]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



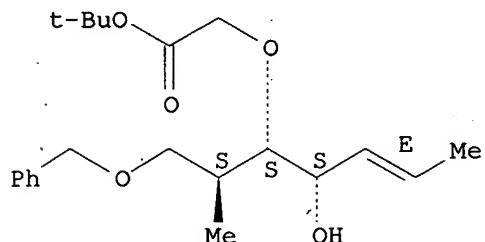
IT 96720-58-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of)

RN 96720-58-0 HCPLUS

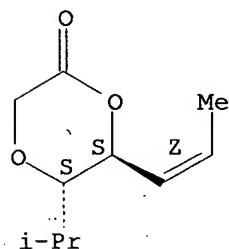
CN Acetic acid, [[2-hydroxy-1-[1-methyl-2-(phenylmethoxy)ethyl]-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [1S-[1R*(R*),2R*,3E]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



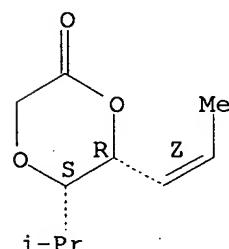
IT 107133-99-3P 107134-00-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 107133-99-3 HCPLUS
CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-, [5 α , 6 β (Z)]-
(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



RN 107134-00-9 HCPLUS
CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-,
[5 α , 6 α (Z)]- (9CI) (CA INDEX NAME)

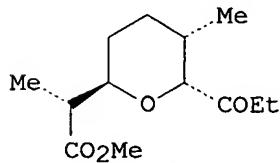
Relative stereochemistry.
Double bond geometry as shown.



L12 ANSWER 27 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:422333 HCPLUS
DOCUMENT NUMBER: 103:22333
TITLE: Ionophore synthesis. An enantioselective route to the
left-wing of indanomycin (X-14547A)
AUTHOR(S): Burke, Steven D.; Armistead, David M.; Fevig, John M.
CORPORATE SOURCE: Dep. Chem., Univ. South Carolina, Columbia, SC, 29208,

USA

SOURCE: Tetrahedron Letters (1985), 26(9), 1163-6
DOCUMENT TYPE: CODEN: TELEAY; ISSN: 0040-4039
LANGUAGE: Journal
OTHER SOURCE(S): English
CASREACT 103:22333
GI



I

AB An enantioselective synthesis of the tetrahydropyran I of the ionophore X-14547A uses stereoselective 1,2-carbonyl addns. and an oxapyranone-to-dihydropyran enolate Claisen rearrangement as key stereocontrol elements.

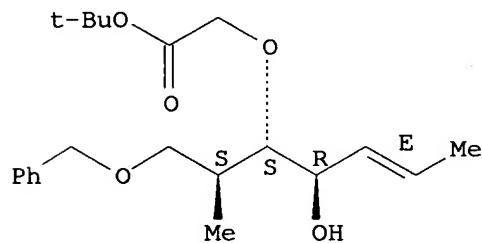
IT 96789-96-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and lactonization of)

RN 96789-96-7 HCPLUS

CN Acetic acid, [[2-hydroxy-1-[1-methyl-2-(phenylmethoxy)ethyl]-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [1S-[1R*(R*),2S*,3E]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



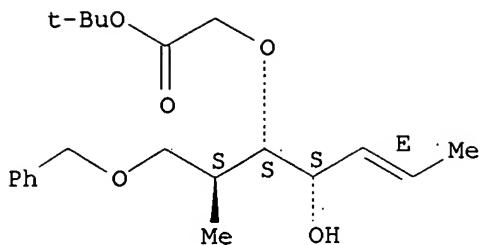
IT 96720-58-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of)

RN 96720-58-0 HCPLUS

CN Acetic acid, [[2-hydroxy-1-[1-methyl-2-(phenylmethoxy)ethyl]-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [1S-[1R*(R*),2R*,3E]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 96720-60-4P

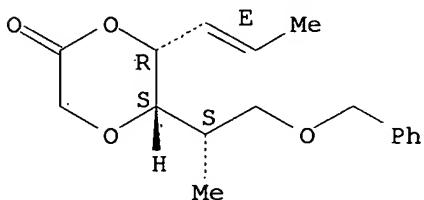
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and rearrangement of)

RN 96720-60-4 HCAPLUS

CN 1,4-Dioxan-2-one, 5-[1-methyl-2-(phenylmethoxy)ethyl]-6-(1-propenyl)-, [5S-[5 α (R*), 6 α (E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L12 ANSWER 28 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1984:592333 HCAPLUS

DOCUMENT NUMBER: 101:192333

TITLE: Polysubstituted dihydropyrans via the enolate Claisen rearrangement. A stereocontrolled route to C-pyranosides

AUTHOR(S): Burke, Steven D.; Armistead, David M.; Schoenen, Frank J.

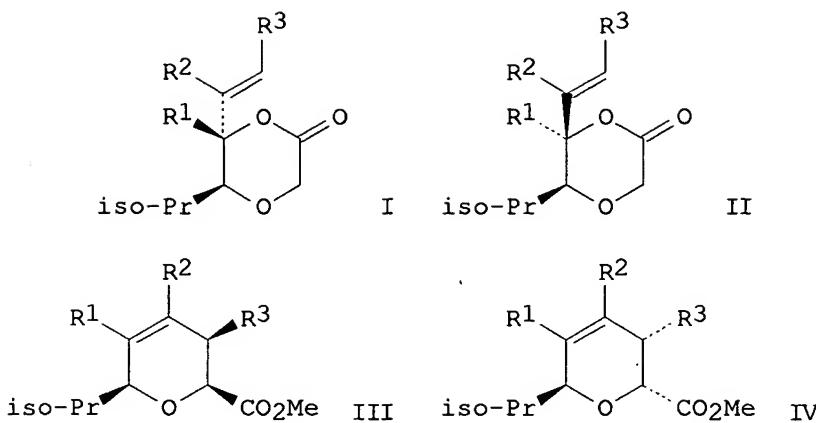
CORPORATE SOURCE: Dep. Chem., Univ. South Carolina, Columbia, SC, 29208, USA

SOURCE: Journal of Organic Chemistry (1984), 49(22), 4320-2
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB A new method for the stereoselective synthesis of dihydropyranes of a variety of substitution pattern is described. The method invoked [3,3] sigmatropic reorganizations of 6-alkenyl-4-oxapyan-2-ones of general structure I or II ($R_1 = H, Me$; $R_2 = H, Me$; $R_3 = H, SiMe_3, Me$) to the product dihydropyranes (III or IV resp.) via a modification of the enolate Claisen rearrangement. Isolated yields in this key step ranged from 52 to 91% for the eleven cases examined. The substrate oxapyanones were prepared by sequential 1,2-carbonyl addns. with vinylmetallic and/or hydride delivery reagents. Observed stereoselectivities for these processes ranged from 1.53:1 to $> 100:1$.

IT 92420-55-8P 92456-09-2P

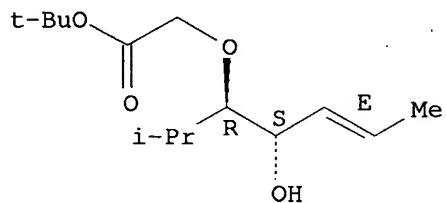
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and lactonization of)

RN 92420-55-8 HCPLUS

CN Acetic acid, [[2-hydroxy-1-(1-methylethyl)-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [$R^*, S^*-(E)$]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

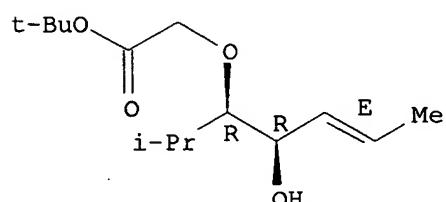


RN 92456-09-2 HCPLUS

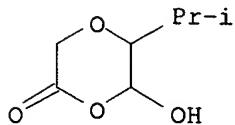
CN Acetic acid, [[2-hydroxy-1-(1-methylethyl)-3-pentenyl]oxy]-, 1,1-dimethylethyl ester, [$R^*, R^*-(E)$]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

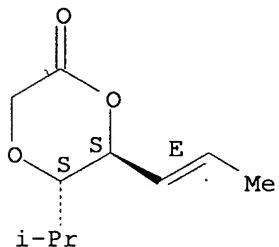


IT 92420-51-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and reaction of, with vinylmagnesium bromide)
 RN 92420-51-4 HCPLUS
 CN 1,4-Dioxan-2-one, 6-hydroxy-5-(1-methylethyl)- (9CI) (CA INDEX NAME)



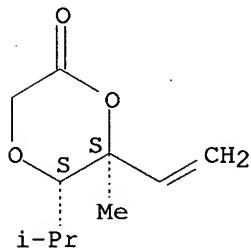
IT 92420-33-2P 92420-34-3P 92420-35-4P
 92420-36-5P 92420-37-6P 92420-38-7P
 92471-18-6P 92471-19-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and rearrangement of, dihydropyran derivative from)
 RN 92420-33-2 HCPLUS
 CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-, [5 α ,6 β (E)]-
 (9CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry as shown.



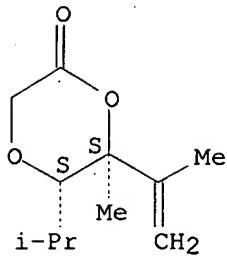
RN 92420-34-3 HCPLUS
 CN 1,4-Dioxan-2-one, 6-ethenyl-6-methyl-5-(1-methylethyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 92420-35-4 HCPLUS
 CN 1,4-Dioxan-2-one, 6-methyl-6-(1-methylethyl)-5-(1-methylethyl)-, trans- (9CI) (CA INDEX NAME)

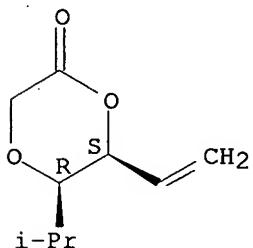
Relative stereochemistry.



RN 92420-36-5 HCPLUS

CN 1,4-Dioxan-2-one, 6-ethenyl-5-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

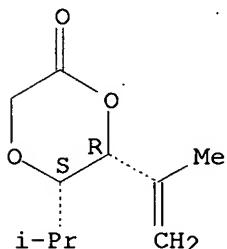
Relative stereochemistry.



RN 92420-37-6 HCPLUS

CN 1,4-Dioxan-2-one, 6-(1-methylethenyl)-5-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

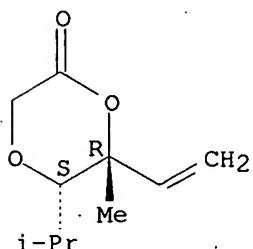
Relative stereochemistry.



RN 92420-38-7 HCPLUS

CN 1,4-Dioxan-2-one, 6-ethenyl-6-methyl-5-(1-methylethyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

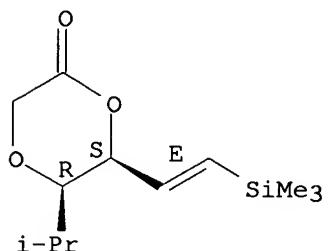


RN 92471-18-6 HCPLUS

CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-[2-(trimethylsilyl)ethenyl]-, [5 α ,6 α (E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

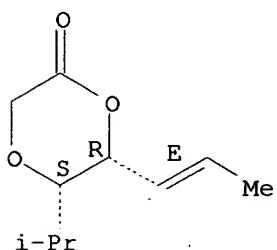


RN 92471-19-7 HCPLUS

CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-(1-propenyl)-, [5 α ,6 α (E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



IT 92420-30-9P 92420-31-0P

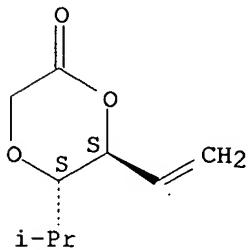
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and rearrangement of, dihydropyran derivs. from)

RN 92420-30-9 HCPLUS

CN 1,4-Dioxan-2-one, 6-ethenyl-5-(1-methylethyl)-, trans- (9CI) (CA INDEX NAME)

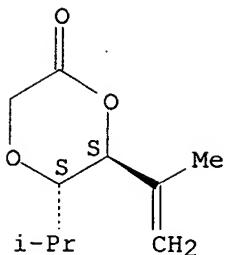
Relative stereochemistry.



RN 92420-31-0 HCPLUS

CN 1,4-Dioxan-2-one, 6-(1-methylethethyl)-5-(1-methylethyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT 92420-32-1

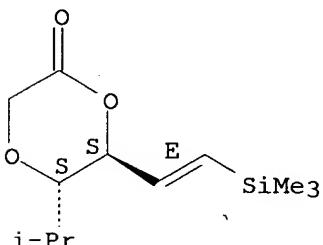
RL: RCT (Reactant); RACT (Reactant or reagent)
(rearrangement of, dihydropyranan derivs. from)

RN 92420-32-1 HCAPLUS

CN 1,4-Dioxan-2-one, 5-(1-methylethyl)-6-[2-(trimethylsilyl)ethenyl]-, [5α,6β(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.



L12 ANSWER 29 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:73676 HCAPLUS

DOCUMENT NUMBER: 84:73676

TITLE: Ether diester derivatives of p-dioxanone

INVENTOR(S): Snapp, Thomas C., Jr.; Blood, Alden E.

PATENT ASSIGNEE(S): Eastman Kodak Co., USA

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

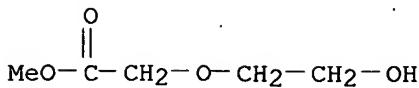
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

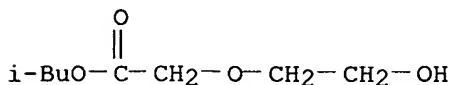
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|-------------|-----------------|------------|
| US 3929847 | A | 19751230 | US 1974-508314 | 19740925 |
| PRIORITY APPLN. INFO.: | | | US 1974-508314 | A 19740925 |
| AB | Six ether esters, R ₁ CO ₂ CH ₂ CH ₂ OCH ₂ CO ₂ R [R ₁ = Me, Pr, BuCH ₂ , Ph; R = Me, Bu, Me ₂ CHCH ₂ , Me(CH ₂) ₃ CH ₂ CH ₂], useful as plasticizers for polyvinyl chloride, viscosity improvers for motor oil and brake fluid, and as solvents, were prepared by treating p-dioxan-2-one with ROH at apprx. 50-100° (with or without a catalyst, e.g., pyridine) and esterifying the resultant HOCH ₂ CH ₂ OCH ₂ CO ₂ R with R ₁ CO ₂ H or its anhydride. | | | |
| IT | 58349-37-4P | 58349-40-9P | | |
| | RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) | | | |
| | (preparation and esterification of) | | | |
| RN | 58349-37-4 | HCAPLUS | | |

CN Acetic acid, (2-hydroxyethoxy)-, methyl ester (9CI) (CA INDEX NAME)



RN 58349-40-9 HCPLUS

CN Acetic acid, (2-hydroxyethoxy)-, 2-methylpropyl ester (9CI) (CA INDEX NAME)

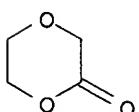


IT 3041-16-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with alcs.)

RN 3041-16-5 HCPLUS

CN 1,4-Dioxan-2-one (9CI) (CA INDEX NAME)



L12 ANSWER 30 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1975:73649 HCPLUS

DOCUMENT NUMBER: 82:73649

TITLE: Aromatic polyesters with high molecular weight

INVENTOR(S): Shima, Takeo; Urasaki, Takanori; Kobayashi, Takayuki;
Oka, Isao

PATENT ASSIGNEE(S): Teijin Ltd.

SOURCE: Jpn. Tokkyo Koho, 7 pp.

CODEN: JAXXAD

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 49005629 | B | 19740208 | JP 1970-20609 | 19700311 |
| PRIORITY APPLN. INFO.: | | | JP 1970-20609 | 19700311 |

AB Aromatic polyesters with high mol. weight and low carboxy end group content were

prepared by adding an aryl terephthalate and an ester from ethylene glycol and oxalic acid or malonic acid derivative at an intermediate stage of the polyester synthesis. For example, di-Me terephthalate 97, ethylene glycol 69, Mn(OAc)₂·4H₂O 0.049, and Sb₂O₃ 0.04 part were heated at 160-230° with MeOH distillation, treated with 0.02 part H₃PO₃, heated at 280° under N for 30 min, at 280°/15 mmHg for 30 min, and at 280°/0.15 mmHg for 60 min, treated with 0.89 part bis(2-hydroxyethyl) oxalate (I) and 1.2 parts di-Ph terephthalate, and heated at 280°/0.2 mmHg for 30 min to give a polyester [53417-68-8] with lower carboxy end group content than that prepared

without I and/or II and higher mol. weight than that prepared without I + II or II.

IT 53417-64-4P 53417-68-8P

RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of, with high mol. weight and low carboxy end group content)

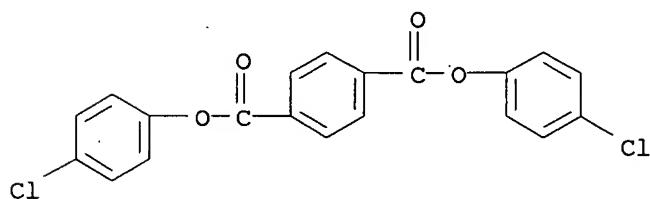
RN 53417-64-4 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, dimethyl ester, polymer with
bis(4-chlorophenyl) 1,4-benzenedicarboxylate, dimethyl
1,4-benzenedicarboxylate, 1,4-dioxane-2,3-dione and 1,2-ethanediol (9CI)
(CA INDEX NAME)

CM 1

CRN 24707-03-7

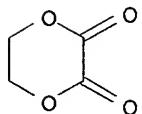
CMF C20 H12 Cl2 O4



CM 2

CRN 3524-70-7

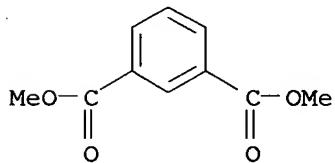
CMF C4 H4 O4



CM 3

CRN 1459-93-4

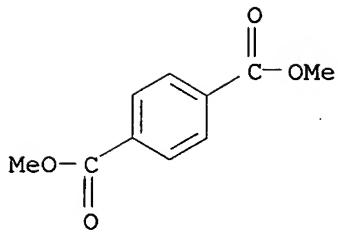
CMF C10 H10 O4



CM 4

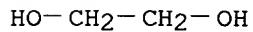
CRN 120-61-6

CMF C10 H10 O4



CM 5

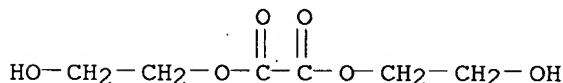
CRN 107-21-1
CMF C2 H6 O2



RN 53417-68-8 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester, polymer with
bis(2-hydroxyethyl) ethanedioate, diphenyl 1,4-benzenedicarboxylate and
1,2-ethanediol (9CI) (CA INDEX NAME)

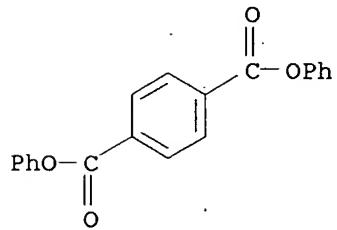
CM 1

CRN 25781-56-0
CMF C6 H10 O6



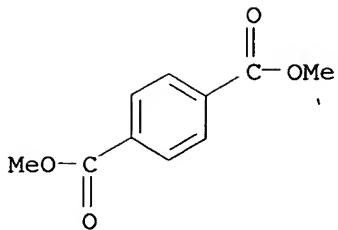
CM 2

CRN 1539-04-4
CMF C20 H14 O4



CM 3

CRN 120-61-6
CMF C10 H10 O4



CM 4

CRN 107-21-1
CMF C2 H6 O2

HO—CH₂—CH₂—OH

L12 ANSWER 31 OF 33 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1973:147370 HCAPLUS
 DOCUMENT NUMBER: 78:147370
 TITLE: Ether carboxylic acids
 INVENTOR(S): Borggrefe, Gerhard
 PATENT ASSIGNEE(S): Henkel und Cie. G.m.b.H.
 SOURCE: Ger. Offen., 12 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|-----------------|-----------------|----------|
| DE 2142207 | A1 | 19730301 | DE 1971-2142207 | 19710823 |
| DE 2142207 | C2 | 19831222 | | |
| US 4002676 | A | 19770111 | US 1972-221816 | 19720128 |
| NL 7201313 | A | 19720807 | NL 1972-1313 | 19720201 |
| NL 7201312 | A | 19730227 | NL 1972-1312 | 19720201 |
| FR 2150274 | A1 | 19730406 | FR 1972-3431 | 19720202 |
| BR 7200585 | D0 | 19730823 | BR 1972-585 | 19720202 |
| GB 1339111 | A | 19731128 | GB 1972-4790 | 19720202 |
| IT 964050 | B | 19740121 | IT 1972-28266 | 19720818 |
| BE 787845 | A1 | 19730222 | BE 1972-121206 | 19720822 |
| AT 323708 | B | 19750725 | AT 1972-7254 | 19720822 |
| CH 574893 | A5 | 19760430 | CH 1972-12421 | 19720822 |
| JP 48029718 | A | 19730419 | JP 1972-84407 | 19720823 |
| JP 57060326 | B | 19821218 | | |
| ZA 7205797 | A | 19730530 | ZA 1972-5797 | 19720823 |
| PRIORITY APPLN. INFO.: | | | | |
| | | DE 1971-2104976 | A | 19710203 |
| | | DE 1971-2142207 | A | 19710823 |
| | | DE 1971-2153459 | A | 19711027 |
| | | DE 1971-2153460 | A | 19711027 |

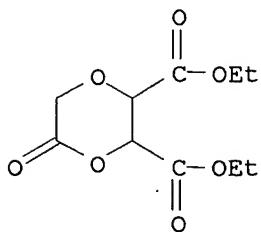
AB HO₂CCH₂OCH(CO₂H)CH(OH)CO₂H and HO₂CCH₂CH(CH₂OH)OCH₂CO₂H (I), useful as Ca complexing agents. were prepared by reaction of di-Et tartrate or HOCH₂CH(CH₂Cl)OH (II), resp., with N₂CHCO₂Et and saponification of the esters formed. Thus, reaction of II with N₂CHCO₂Et in BF₃·Et₂O-containing CHCl₃ at -20° gave 55% EtO₂CCH₂CH(CH₂Cl)OCH₂CO₂Et which was saponified with KOH at 80° to give partially lactonized I.

IT 40774-92-3P 40774-93-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

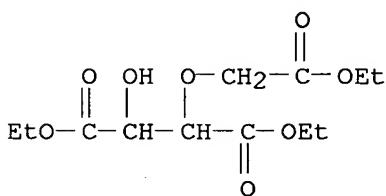
RN 40774-92-3 HCPLUS

CN 1,4-Dioxane-2,3-dicarboxylic acid, 5-oxo-, diethyl ester (9CI) (CA INDEX
NAME)



RN 40774-93-4 HCPLUS

CN Butanedioic acid, 2-(2-ethoxy-2-oxoethoxy)-3-hydroxy-, diethyl ester (9CI)
(CA INDEX NAME)



L12 ANSWER 32 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1963:59741 HCPLUS

DOCUMENT NUMBER: 58:59741

ORIGINAL REFERENCE NO.: 58:10196g-h,10197a-c

TITLE: α -Substituted derivatives of normal aliphatic
long-chain acids

AUTHOR(S): Piekarski, Salomon

CORPORATE SOURCE: C.N.R.S., Bellevue, Fr.

SOURCE: Oleagineux (1962), 17, 785-9

CODEN: OLEAAF; ISSN: 0030-2082

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Alkylpiperazinones (I) were prepared by treatment of (α -bromohexanoic to -octadecanoic acid esters with ethylenediamine (II) hydrate. α -Bromomyristic acid Me ester (10.3 g.), 4 g. II hydrate, and 75 ml. EtOH was kept overnight at 40°. The mixture was then refluxed 2 hrs. and EtOH in excess distilled to yield the I HBr salt on cooling; the I or I HBr salt could be recrystd. from H₂O (alkyl of I HBr salt = C₁₄H₂₉ and C₁₆H₃₃), from Bu₂O (from I, alkyl = C₁₀H₂₁) or from mixts. of petr.-ether and Me₂CO. The following I were prepared (alkyl group and m.p. given): Bu, liquid; C₆H₁₃, liquid; C₈H₁₇ 58-60°; C₁₀H₂₁, 70-70.8°; C₁₂H₂₅, 79-80°; C₁₁H₂₉, 87.7-88.5°; C₁₆H₃₃, 90-1°.

The mol. extinction coeffs. of the benzenesulfonamide derivs. were

measured at λ 231 m μ (alkyl group, m.p. and ϵ M given):

Bu, 101.7-2.7°, 5590; C₆H₁₃, 106.3-7.6°, 5.400; C₈H₁₇,

112-13°, 5.490; C₁₀H₂₁, 111.5-12.5°, 5.550; C₁₂H₂₅,

114.8-15.3°, 5.740; C₁₄H₂₉, 115.5-16.1°, 5.550; C₁₆H₃₃,

117-18°, 5.580. The mixture of α -bromocapric acid Me ester (5 g.), 3.1 g. o-phenylenediamine, and 40 ml. EtOH was kept at

60° overnight under N and then refluxed 4 hrs. (N stream). EtOH

was distilled, the product dissolved in C₆H₆ and washed with diluted HCl. The raw product obtained was recrystd. from EtOH to yield octyl-benzopiperazinone. Similarly, the following alkylbenzopiperazinones were prepared (alkyl group, m.p., and ϵ M at 231 m μ given): C₆H₁₃, 127-8°, 18.800; C₈H₁₇, 123-4°, 18.400; C₁₂H₂₅, 121-2°, 18.700; C₁₄H₂₉, 118-19.5° 18.650. A mixture of distilled glycol (17.4 g.), 3.8 g. Na, and 125 ml. anhydrous dioxane was heated with stirring to disperse the alcohalate formed. After complete reaction, the flask was put in an oil bath at 61° and 37.45 g. α -bromocaprylic acid Me ester in 50 ml. anhydrous dioxane added with vigorous stirring. The mixture was stirred 5 hrs. The reaction was stopped by addition of H₂O and neutralization with concentrated HNO₃. The organic fraction

was dissolved in Et₂O, washed with H₂O, and dried; in a 50 to 120-mg. sample, the residual Br was converted to a metal salt by saponification and determined

with KSCN after addition of AgNO₃ in known excess; the OH number was also determined

A mixture of the ester alc. (4.1 g.) and 50 ml. dioxane or toluene was refluxed, and samples were periodically taken to determine the alc. function by acetylation. The following ester alc. were prepared (alkyl group, OH and saponification nos. given): C₆H₁₃, 254, 256; C₁₀H₂₁, 207, 202. The following alkylidioxanones were prepared (alkyl group, m.p., and saponification number given): Et,

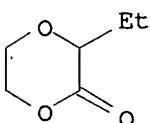
liquid, 439; Bu, liquid, 352; C₈H₁₇, 56-7°, 261; C₁₀H₂₁, 62-3°, 233; C₁₂H₂₅, 68-9°, 205; C₁₄H₂₉, 73.5-4.5°, 187; C₁₆H₃₃, 77-8.5°, 170. Tetradecylpiperazinone (10 mg./l.) inhibited the development of *Staphylococcus aureus* during 48 hrs. The alkylbenzopiperazinones gave 3 λ 231, 282, and 332 m μ .

IT 3206-98-2P, Butyric acid, 2-(2-hydroxyethoxy)-, δ -lactone
4384-04-7P, Hexanoic acid, 2-(2-hydroxyethoxy)-, δ -lactone
4445-21-0P, Octadecanoic acid, 2-(2-hydroxyethoxy)-,
 δ -lactone 5981-23-7P, Tetradecanoic acid,
2-(2-hydroxyethoxy)-, δ -lactone 6005-35-2P, Hexadecanoic
acid, 2-(2-hydroxyethoxy)-, δ -lactone 6049-61-2P, Decanoic
acid, 2-(2-hydroxyethoxy)-, δ -lactone 6812-57-3P,
Dodecanoic acid, 2-(2-hydroxyethoxy)-, δ -lactone 91243-84-4P
, Octanoic acid, 2-(2-hydroxyethoxy)-, methyl ester 92862-45-8P,
Dodecanoic acid, 2-(2-hydroxyethoxy)-, methyl ester

RL: PREP (Preparation)
(preparation of)

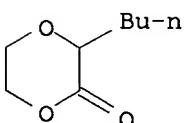
RN 3206-98-2 HCPLUS

CN 1,4-Dioxan-2-one, 3-ethyl- (9CI) (CA INDEX NAME)



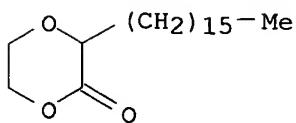
RN 4384-04-7 HCPLUS

CN 1,4-Dioxan-2-one, 3-butyl- (9CI) (CA INDEX NAME)



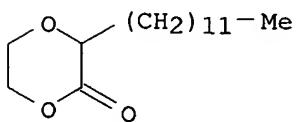
RN 4445-21-0 HCPLUS

CN 1,4-Dioxan-2-one, 3-hexadecyl- (9CI) (CA INDEX NAME)



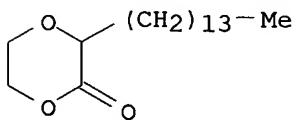
RN 5981-23-7 HCPLUS

CN p-Dioxan-2-one, 3-dodecyl- (8CI) (CA INDEX NAME)



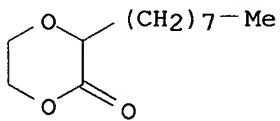
RN 6005-35-2 HCPLUS

CN 1,4-Dioxan-2-one, 3-tetradecyl- (9CI) (CA INDEX NAME)



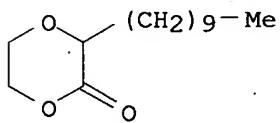
RN 6049-61-2 HCPLUS

CN 1,4-Dioxan-2-one, 3-octyl- (9CI) (CA INDEX NAME)



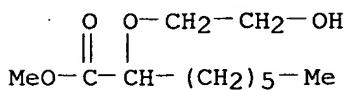
RN 6812-57-3 HCPLUS

CN 1,4-Dioxan-2-one, 3-decyl- (9CI) (CA INDEX NAME)



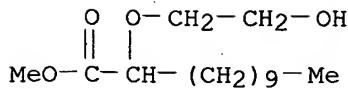
RN 91243-84-4 HCPLUS

CN Octanoic acid, 2-(2-hydroxyethoxy)-, methyl ester (7CI) (CA INDEX NAME)



RN 92862-45-8 HCPLUS

CN Dodecanoic acid, 2-(2-hydroxyethoxy)-, methyl ester (7CI) (CA INDEX NAME)



L12 ANSWER 33 OF 33 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1962:79238 HCPLUS

DOCUMENT NUMBER: 56:79238

ORIGINAL REFERENCE NO.: 56:15419b-f

TITLE: Preparation of aminoalkyl esters of benzilic acid

AUTHOR(S): Ioffe, D. V.; Kuznetsov, S. G.

CORPORATE SOURCE: Toxicol. Inst., Acad. Med. Sci., Leningrad

SOURCE:

Zhurnal Obshchey Khimii (1961), 31, 3051-6

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Refluxing benzilic acid with $\text{BrCH}_2\text{CH}_2\text{OH}$ in the presence of H_2SO_4 in C_6H_6

with azeotropic removal of H_2O 5-6 hrs. gave 76% $\text{Ph}_2\text{C}(\text{CO}_2\text{H})\text{OCH}_2\text{CH}_2\text{Br}$, m.

143.5°, and 14% more soluble 2-bromoethyl benzilate, b2

187-90°. Similarly, $\text{ClCH}_2\text{CH}_2\text{OH}$ gave 20% 2-chloroethyl benzilate,

b3 178-84°, and 74% $\text{Ph}_2\text{C}(\text{CO}_2\text{H})\text{OCH}_2\text{CH}_2\text{Cl}$, m. 129°. $\text{ICH}_2\text{CH}_2\text{OH}$

similarly gave only 91% $\text{Ph}_2\text{C}(\text{CO}_2\text{H})\text{OCH}_2\text{CH}_2\text{I}$, decomposed at 154°.

Refluxing $\text{Ph}_2\text{C}(\text{CO}_2\text{H})\text{OCH}_2\text{CH}_2\text{X}$ with pyridine, Et_3N or diethanolamine in C_6H_6

1 hr. gave 100% 3,3-diphenyl-2-oxo-1,4-dioxane, m. 98°, also formed

by the action of EtONa - EtOH , or from the reaction of $\text{HOCH}_2\text{CH}_2\text{OH}$ with Na

followed by $\text{Ph}_2\text{ClCCOCl}$ in xylene. Refluxing the dioxane derivative with EtOH containing some Na 1 hr. gave a precipitate of $\text{Ph}_2\text{C}(\text{CO}_2\text{Na})\text{OCH}_2\text{CH}_2\text{OH}$, which

after

acidification gave the free acid, m. 118-20°, and which lactonized on being heated in C_6H_6 or on standing. The Na salt and p-nitrobenzyl

bromide gave $\text{Ph}_2\text{C}(\text{OCH}_2\text{CH}_2\text{OH})\text{CO}_2\text{CH}_2\text{C}_6\text{H}_4\text{NO}_2\text{-p}$, m. 120°. Heating

$\text{Ph}_2\text{CClCOCl}$ with $\text{BrCH}_2\text{CH}_2\text{OH}$ at 120° (finally 2 hrs. at 140°)

gave after an aqueous treatment 82% $\text{Ph}_2\text{CClCO}_2\text{CH}_2\text{CH}_2\text{Br}$, b8 193-4°, n_{20D} 1.5917, d₂₀ 1.4320, which refluxed 2 hrs. in C_6H_6 with Et_2NH gave after

the usual treatment 56% diethylaminoethyl benzilate HCl salt m.

174-5° (EtOH - Me_2CO). Similarly, Me_2NH gave the dimethylaminoethyl

analog, m. 185°. Benzilic acid refluxed in C_6H_6 with $\text{HOCH}_2\text{CH}_2\text{OH}$ in

the presence of H_2SO_4 gave in 5-6 hrs. 81% 2-hydroxyethyl benzilate, m.

96°, which gave the p-toluenesulfonate, m. 111-13°, on being

treated with tosyl chloride in Me_2CO - K_2CO_3 . This refluxed in MePh 1 hr.

with N-methylaminobutanol then treated with aqueous HCl gave after addition of NH_4OH 67% N-methyl-N-(δ -hydroxybutyl)aminoethyl benzilate, m.

70-70.5°.

IT 95319-69-0P, Acetic acid, (2-hydroxyethoxy)diphenyl-,

p-nitrobenzyl ester 97754-49-9P, Acetic acid,

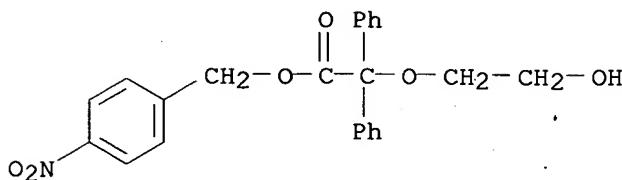
(2-hydroxyethoxy)diphenyl-, δ -lactone

RL: PREP (Preparation)

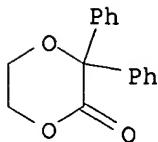
(preparation of)

RN 95319-69-0 HCPLUS

CN Acetic acid, (2-hydroxyethoxy)diphenyl-, p-nitrobenzyl ester (7CI) (CA
INDEX NAME)



RN 97754-49-9 HCPLUS
CN 1,4-Dioxan-2-one, 3,3-diphenyl- (9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 13:12:57 ON 10 JAN 2007)

FILE 'CASREACT' ENTERED AT 13:13:13 ON 10 JAN 2007

L1 STRUCTURE UPLOADED
L2 0 S L1
L3 1 S L1 FULL

FILE 'REGISTRY' ENTERED AT 13:14:17 ON 10 JAN 2007

L4 STRUCTURE UPLOADED
L5 5 S L4
L6 610 S L4 FULL
L7 STRUCTURE UPLOADED
L8 3 S L7
L9 678 S L7 FULL

FILE 'HCPLUS, CHEMCATS' ENTERED AT 13:18:44 ON 10 JAN 2007

L10 957 S L6
L11 431 S L9
L12 33 S L10 AND L11

=> s 15

L13 5 L5

=> d 1-5 ibib abs hitstr

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Enter "HELP STN" for information on contacting the nearest STN Help
Desk by telephone or via SEND in the STNMAIL file.

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L13 ANSWER 1 OF 5 HCPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:137293 HCPLUS
DOCUMENT NUMBER: 134:198084
TITLE: Biodegradable alkylene oxide block copolymer
compositions for solubilizing poorly water-soluble
drugs and drug delivery compositions containing the
same same
INVENTOR(S): Seo, Min-Hyo; Choi, In-Ja
PATENT ASSIGNEE(S): Samyang Corporation, S. Korea
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

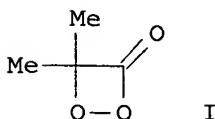
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2001012718 | A1 | 20010222 | WO 2000-KR885 | 20000810 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| KR 2001017804 | A | 20010305 | KR 1999-33500 | 19990814 |
| CA 2381729 | A1 | 20010222 | CA 2000-2381729 | 20000810 |
| AU 2000064792 | A | 20010313 | AU 2000-64792 | 20000810 |
| AU 763154 | B2 | 20030717 | | |
| EP 1226212 | A1 | 20020731 | EP 2000-952029 | 20000810 |
| EP 1226212 | B1 | 20061011 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| JP 3363142 | B1 | 20030108 | JP 2001-517608 | 20000810 |
| JP 2003507514 | T | 20030225 | | |
| NZ 517036 | A | 20030725 | NZ 2000-517036 | 20000810 |
| AT 342306 | T | 20061115 | AT 2000-952029 | 20000810 |
| US 6616941 | B1 | 20030909 | US 2001-807487 | 20010713 |
| PRIORITY APPLN. INFO.: | | | KR 1999-33500 | A 19990814 |
| | | | WO 2000-KR885 | W 20000810 |

AB The composition capable of forming a micelle in body fluids or in an aqueous medium

and solubilizing poorly water-soluble drugs, comprises an amphiphilic block copolymer having a hydrophilic poly(alkylene glycol) block and hydrophobic biodegradable polymer block in a poly(ethylene glycol) medium. Thus, 20 g poly(ethylene glycol) monomethyl ether was reacted with 19 g DL-lactide in presence of 24.5 mg stannous octoate to form a diblock copolymer with mol. weight 1850-2000 daltons in yield 95%.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

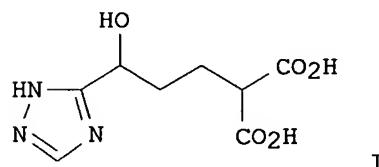
L13 ANSWER 2 OF 5 HCPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1996:268463 HCPLUS
 DOCUMENT NUMBER: 125:32968
 TITLE: Steric and Stereoelectronic Control of the Mode Selectivity as a Function of Alkene Structure in the Reaction with Dimethyl α -Peroxy Lactone: Cycloadducts and Ene Products versus Epoxides
 AUTHOR(S): Adam, Waldemar; Blancafort, Lluis
 CORPORATE SOURCE: Institute of Organic Chemistry, University of Wuerzburg, Wuerzburg, D-97074, Germany
 SOURCE: Journal of the American Chemical Society (1996), 118(20), 4778-87
 PUBLISHER: CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: American Chemical Society
 LANGUAGE: Journal
 GI English



AB The oxidation of di-, tri-, and tetrasubstituted alkenes by peroxy lactone I affords cycloaddn., ene, and epoxidn. products. In the presence of methanol, trapping products are also obtained. The observed dichotomy in the product distribution requires two different paths for this reaction, namely, a path via an open, stretched 1,6-dipole and another path for epoxidn. Both paths arise from an SN2 attack of the double bond of the alkene on the peroxide bond of I, the first unsym. (end-on attack), leading to the 1,6-dipole, and the second sym. (central attack) with respect to the approach of the double bond, leading to epoxidn. The 1,6-dipole is postulated to afford the cycloadducts, of which the thermodyn. favored diastereomers are obtained, and the ene products. In the epoxidn., the α -lactone released after oxygen transfer oligomerizes to a polyester or, in the presence of methanol, is trapped as an α -methoxy acid. The reaction is regioselective both with respect to the attacked oxygen atom of I, as revealed by the trapping products, as well as with respect to the attacking carbon atom for unsym. alkenes, as displayed by the ene products. The former regioselectivity is dictated by the inherent polarization of the peroxide bond through the carbonyl group which makes the alkoxy oxygen the more electrophilic one toward nucleophilic attack, while for the latter the incipient pos. charge of the open 1,6-dipole is better stabilized by the more substituted carbon atom of the end-on attacking unsym. alkene. The preferred reaction mode has been found to be sensitive to the structure of the alkene, and the difference in reactivity has been explained in terms of steric and stereoelectronic factors. Thus, for the sterically less hindered cis-di- and trisubstituted alkenes the path along the open 1,6-dipole is favored (stereoelectronic control), while the more sterically demanding trans-di- and tetrasubstituted alkenes react by the epoxidn. mode (steric control).

L13 ANSWER 3 OF 5 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:158253 HCPLUS
 DOCUMENT NUMBER: 124:289375
 TITLE: Synthesis of inhibitors of imidazole glycerol phosphate dehydratase
 AUTHOR(S): Lindell, Stephen D.; Earnshaw, Christopher G.; Wright, Brian J.; Carver, David S.; O'Mahony, Mary J.; Saville-Stones, Elizabeth A.
 CORPORATE SOURCE: AgrEvo UK Limited, Saffron Walden, CB10 1XL, UK
 SOURCE: Bioorganic & Medicinal Chemistry Letters (1996), 6(5), 547-52
 CODEN: BMCL8; ISSN: 0960-894X
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB Novel inhibitors HOCHR(CH₂)_nCH(CO₂H)₂ [R = 1H-1,2,4-triazol-5-yl, 1,2,4-triazol-1-yl; n = 1-3] of the newly discovered herbicide target enzyme imidazole glycerol phosphate dehydratase were prepared. The most potent inhibitor was the analog RCH₂CH(OH)CH₂CH₂P(O)(OH)₂ [R = 1,2,4-triazol-1-yl]. The best of the prepared compds. was I (IC₅₀ = 6 μ M).

ACCESSION NUMBER: 1991:122766 HCAPLUS

DOCUMENT NUMBER: 114:122766

TITLE: Preparation of N-containing terpene lactones and cerebral function improvers containing them

INVENTOR(S): Yoshida, Koichi; Sho, Kyohiko; Kanehira, Koichi; Shiono, Manzo; Yamahara, Joji

PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

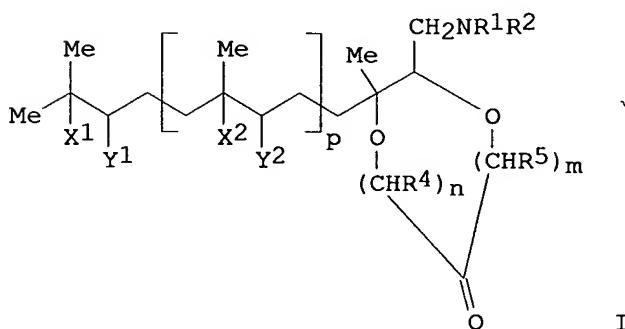
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|----------|
| JP 02243684 | A | 19900927 | JP 1989-64681 | 19890315 |
| PRIORITY APPLN. INFO.: | | | JP 1989-64681 | 19890315 |
| OTHER SOURCE(S): | MARPAT | 114:122766 | | |
| GI | | | | |



AB The title compds. [I; R1, R2 = (un)substituted lower alkyl, (un)substituted aryl, (un)substituted 4-piperidyl, pyridyl, pyridinecarbonyl, isoquinolyl; NR1R2 may form 5- or 6-membered heterocyclcyl (which may contain 1-3 O, S, NR3, CO, CH2CH2, CH:CR3, CH:N, and/or 1,2-phenylene); R3 = H, (un)substituted lower alkyl, (un)substituted aryl; R4, R5 = H, lower alkyl; X1 = H, OH; Y1 = H; X1Y1 may form bond; X2 = H, OH; Y2 = H; X2Y2 may form bond; when n = 1 or 0, then m = 0 or 1, resp.; p = 0-2], useful for treatment of cerebral ischemia, anoxia, dementia, etc., were prepared 1-(1H-Imidazol-1-yl)-3,7,11-trimethyl-2,3-dodecanediol was treated with BuLi in THF at 10° for 1 h and the mixture was treated with Et bromoacetate to give 50% 6-(4,8-dimethylnonyl)-6-methyl-5-(1H-imidazol-1-yl)methyl-1,4-dioxan-2-one (II), which at 100 mg/kg (no information on administration route) inhibited KCN-induced anoxia in mice, resulting in survival rate of 88.9%. LD50 values of I were ≥2000 mg/kg p.o. in mice. Capsules were formulated containing II 5, crystalline cellulose 80, corn starch 20, lactose 22, and poly(vinylpyrrolidone) 3 g.

DOCUMENT NUMBER: 75:129733
 TITLE: Derivatives of 1,4-dioxan-2-one
 AUTHOR(S): Pailer, M.; Streicher, W.; Huebsch, W. J.
 CORPORATE SOURCE: Org. Chem. Inst., Univ. Wien, Vienna, Austria
 SOURCE: Monatsh. Chem. (1971), 102(4), 1048-54
 CODEN: MOCHAP
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 75:129733
 AB 3,3-Diphenyl-1,4-dioxan-2-one and its 6-chloromethyland
 6-(2-bromoethyl)-derivs. were prepared in nearly quant. yield by treating
 benzilic acid with HOCHRCH₂OH (R = H, CH₂Cl, CH₂CH₂Br) with removal of the
 H₂O formed. No isomeric product was obtained. The halogen atoms of the
 alkyl side chains were replaced by NET₂, piperidino, pyrrolidino, or
 morpholino. The 6-aminoalkyl-3,3-diphenyl-1,4-dioxan-2-ones obtained had
 a spasmolytic activity .apprx.20% that of papaverine.

| | | | |
|--|------------|---------|--|
| => file hcplus hcaold uspatfull epfull | | | |
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL | |
| | ENTRY | SESSION | |
| FULL ESTIMATED COST | 249.65 | 710.31 | |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL | |
| | ENTRY | SESSION | |
| CA SUBSCRIBER PRICE | -30.42 | -30.42 | |

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FILE 'USPATFULL' ENTERED AT 13:32:59 ON 10 JAN 2007
 CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EPFULL' ENTERED AT 13:32:59 ON 10 JAN 2007
 COPYRIGHT (C) 2007 European Patent Office / FIZ Karlsruhe

=> s lactic acid derivative or lactic acid ester? or ?lactate or lactate ester?
 L14 174863 LACTIC ACID DERIVATIVE OR LACTIC ACID ESTER? OR ?LACTATE OR
 LACTATE ESTER?

=> s l14 and (epoxide or epoxy compound or ?oxirane)
 L15 5876 L14 AND (EPOXIDE OR EPOXY COMPOUND OR ?OXIRANE)

=> s l15 and (coupl? or condens?)
 L16 4695 L15 AND (COUPL? OR CONDENS?)

=> s l16 and (boron trifluoride or BF₃ or acid catalyst or mineral acid or solid
 acid)
 L17 1038 L16 AND (BORON TRIFLUORIDE OR BF₃ OR ACID CATALYST OR MINERAL
 ACID OR SOLID ACID)

=> s glycidyl lactate
 L18 2 GLYCIDYL LACTATE

=> s l17 and (ring closing or ring closure or cycliz? or cyclis?)

L19 167 L17 AND (RING CLOSING OR RING CLOSURE OR CYCLIZ? OR CYCLIS?)

=> s 119 and (saponific? or acidifi? or transesterif?)

L20 98 L19 AND (SAPONIFIC? OR ACIDIFI? OR TRANSESTERIF?)

=> s 120 and (?propionate or ?propionate ester)

L21 62 L20 AND (?PROPIONATE OR ?PROPIONATE ESTER)

=> s 121 and (fragrance or flavor or flavour or organoleptic)

L22 12 L21 AND (FRAGRANCE OR FLAVOR OR FLAVOUR OR ORGANOLEPTIC)

=> d 1-12 ibib abs

L22 ANSWER 1 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2006:175282 USPATFULL

TITLE: Inhibition of NF- κ B by triterpene compositions

INVENTOR(S): Guterman, Jordan U., Houston, TX, UNITED STATES

Haridas, Valsala, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 2006148732 | A1 | 20060706 |
| APPLICATION INFO.: | US 2001-992556 | A1 | 20011116 (9) |

| | NUMBER | DATE |
|-----------------------|-----------------|---------------|
| PRIORITY INFORMATION: | US 2000-249710P | 20001117 (60) |
| | US 2001-322859P | 20010917 (60) |

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Robert E. Hanson, FULBRIGHT & JAWORSKI L.L.P., SUITE 2400, 600 CONGRESS AVENUE, AUSTIN, TX, 78701, US

NUMBER OF CLAIMS: 55

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 55 Drawing Page(s)

LINE COUNT: 9565

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods for the inhibition of inflammation by providing, to a cell, in need thereof, monoterpene compositions that inhibit NF- κ B. These compositions may also contain a carrier moiety that renders the monoterpene composition membrane permeable. The carrier may include triterpenoid moieties, sugars, lipids, or even additional monoterpene moieties. The composition can also contain additional chemical functionalities. Methods for using these compounds to prevent and treat a wide range of inflammatory conditions, especially, premalignant inflammatory conditions are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 2 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2006:160035 USPATFULL

TITLE: CaSR antagonist

INVENTOR(S): Shinagawa, Yuko, Osaka, JAPAN

Inoue, Teruhiko, Osaka, JAPAN

Kiguchi, Toshihiro, Osaka, JAPAN

Ikenogami, Taku, Osaka, JAPAN

Ogawa, Naoki, Osaka, JAPAN

Nakagawa, Takashi, Osaka, JAPAN

Shindo, Masanori, Osaka, JAPAN

Soejima, Yuki, Osaka, JAPAN

PATENT ASSIGNEE(S): JAPAN TOBACCO INC., Tokyo, JAPAN (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2006135572 | A1 | 20060622 |
| APPLICATION INFO.: | US 2005-286378 | A1 | 20051125 (11) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. WO 2004-JP7758, filed on 28 May 2004, UNKNOWN | | |

| | NUMBER | DATE |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | JP 2003-151610 | 20030528 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112, US | |
| NUMBER OF CLAIMS: | 10 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 2386 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a compound having a calcium-sensitive receptor antagonistic action, a pharmaceutical composition containing the compound, particularly a calcium receptor antagonist and a therapeutic drug for osteoporosis. A compound represented by the following formula (1), a pharmaceutically acceptable salt thereof or an optically active form thereof: ##STR1## wherein each symbol is as defined in the description.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 3 OF 12 USPATFULL on STN
 ACCESSION NUMBER: 2006:124270 USPATFULL
 TITLE: Preparation of lactic acid derivatives and their use
 INVENTOR(S): Selifonov, Sergey, Plymouth, MN, UNITED STATES

| | NUMBER | KIND | DATE |
|---------------------|-----------------|------|-----------------------|
| PATENT INFORMATION: | US 2006105002 | A1 | 20060518 |
| APPLICATION INFO.: | US 2003-523059 | A1 | 20030724 (10) |
| | WO 2003-US23119 | | 20030724 |
| | | | 20051017 PCT 371 date |

| | NUMBER | DATE |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 2002-400474P | 20020802 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US | |
| NUMBER OF CLAIMS: | 17 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 803 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to preparing lactic acid derivatives that are useful as odorants and monomers for polymer synthesis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 4 OF 12 USPATFULL on STN
 ACCESSION NUMBER: 2006:49285 USPATFULL
 TITLE: Therapeutic uses of tri-aryl acid derivatives
 INVENTOR(S): Jayyosi, Zaid, Flemington, NJ, UNITED STATES
 McGeehan, Gerard M., Chester Springs, PA, UNITED STATES
 Kelley, Michael F., West Chester, PA, UNITED STATES

Labaudiniere, Richard F., Collegeville, PA, UNITED STATES
Zhang, Litao, Kennett Square, PA, UNITED STATES
Groneberg, Robert D., Boulder, CO, UNITED STATES
McGarry, Daniel G., King of Prussia, PA, UNITED STATES
Caulfield, Thomas J., Paris, FRANCE
Minnich, Anne, Flemington, NJ, UNITED STATES
Bobko, Mark, Exton, PA, UNITED STATES
Morris, Robert, Wayne, PA, UNITED STATES
Aventis Pharma Deutschland GmbH, Frankfurt am Main, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

PATENT ASSIGNEE(S):

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 7005440 | B1 | 20060228 |
| APPLICATION INFO.: | US 2000-724496 | | 20001128 (9) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. WO 2000-US11490, filed on 28 Apr 2000, PENDING | | |

| | NUMBER | DATE |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 1999-131454P | 19990428 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Wilson, James O. | |
| ASSISTANT EXAMINER: | Fedowitz, Matthew L. | |
| LEGAL REPRESENTATIVE: | Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P. | |
| NUMBER OF CLAIMS: | 56 | |
| EXEMPLARY CLAIM: | 1,10 | |
| LINE COUNT: | 6330 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The use of triaryl acid derivatives of formula (I) ##STR1## and their pharmaceutical compositions as PPAR ligand receptor binders. The PPAR ligand receptor binders of this invention are useful as agonists or antagonists of the PPAR receptor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 5 OF 12 USPATFULL on STN
ACCESSION NUMBER: 2004:228019 USPATFULL
TITLE: Methods and compounds for inhibiting MRP1
INVENTOR(S): Kroin, Julian, Indianapolis, IN, UNITED STATES
Norman, Bryan Hurst, Indianapolis, IN, UNITED STATES
York, Jeremy Schulenburg, Indianapolis, IN, UNITED STATES

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2004176405 | A1 | 20040909 |
| APPLICATION INFO.: | US 2004-797362 | A1 | 20040310 (10) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 2002-130800, filed on 21 May 2002, GRANTED, Pat. No. US 6743794 A 371 of International Ser. No. WO 2000-US32443, filed on 11 Dec 2000, PENDING | | |

| | NUMBER | DATE |
|-----------------------|-----------------|---------------|
| PRIORITY INFORMATION: | US 1999-171373P | 19991222 (60) |
| | US 2000-226076P | 20000817 (60) |
| | US 2000-234539P | 20000922 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |

LEGAL REPRESENTATIVE: ELI LILLY AND COMPANY, PATENT DIVISION, P.O. BOX 6288,
INDIANAPOLIS, IN, 46206-6288

NUMBER OF CLAIMS: 71

EXEMPLARY CLAIM: 1

LINE COUNT: 12657

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention further relates to a method of inhibiting MRPI in a mammal which comprises administering to a mammal in need thereof an effective amount of a compound of formula (I). ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 6 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2003:244959 USPATFULL

TITLE: Spiro compounds as inhibitors of fibrinogen-dependent platelet aggregation

INVENTOR(S): Fisher, Matthew J., Carmel, IN, UNITED STATES
Jakubowski, Joseph A., Indianapolis, IN, UNITED STATES
Masters, John J., Indianapolis, IN, UNITED STATES
Mullaney, Jeffrey T., Indianapolis, IN, UNITED STATES
Paal, Michael, Hamburg, GERMANY, FEDERAL REPUBLIC OF
Ruhter, Gerd, Hamburg, GERMANY, FEDERAL REPUBLIC OF
Ruterborries, Kenneth J., Indianapolis, IN, UNITED STATES
Scarborough, Robert M., Belmont, CA, UNITED STATES
Schotten, Theo, Vierhoefen, GERMANY, FEDERAL REPUBLIC OF
Stenzel, Wolfgang, Reinbek, GERMANY, FEDERAL REPUBLIC OF

NUMBER KIND DATE

PATENT INFORMATION: US 2003171373 A1 20030911

US 6693109 B2 20040217

APPLICATION INFO.: US 2003-354265 A1 20030129 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-899886, filed on 6 Jul 2001, GRANTED, Pat. No. US 6528534 Division of Ser. No. US 1998-43846, filed on 5 Oct 1998, GRANTED, Pat. No. US 6291469 A 371 of International Ser. No. WO 1996-US15703, filed on 27 Sep 1996, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 1995-4557P 19950929 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614

NUMBER OF CLAIMS: 22

EXEMPLARY CLAIM: 1

LINE COUNT: 3045

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to certain spirocyclic compounds substituted with both basic and acidic functionality, which are useful in inhibition of platelet aggregation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 7 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2003:146829 USPATFULL

TITLE: Methods and compounds for inhibiting mrpl

INVENTOR(S): Bonjouklian, Rosanne, Zionsville, IN, UNITED STATES

Cohen, Jeffrey Daniel, Indianapolis, IN, UNITED STATES
 Gruber, Joseph Michael, Brownsburg, IN, UNITED STATES
 Johnson, Douglas Webb, Zionsville, IN, UNITED STATES
 Jungheim, Louis Nickolaus, Indianapolis, IN, UNITED STATES
 Kroin, Julian Stanley, Indianapolis, IN, UNITED STATES
 Lander, Peter Ambrose, Indianapolis, IN, UNITED STATES
 Lin, Ho-Shen, Indianapolis, IN, UNITED STATES
 Lohman, Mark Christopher, Boulder, CO, UNITED STATES
 Muehl, Brian Stephen, Greenwood, IN, UNITED STATES
 Norman, Bryan Hurst, Indianapolis, IN, UNITED STATES
 Patel, Vinod Francis, Acton, MA, UNITED STATES
 Richett, Michael Enrico, Indianapolis, IN, UNITED STATES
 Thrasher, Kenneth Jeff, Indianapolis, IN, UNITED STATES
 Vepachedu, Sreenivasarao, Palo Alto, CA, UNITED STATES
 White, Wesley Todd, Indianapolis, IN, UNITED STATES
 Xie, Yongping, Naperville, IL, UNITED STATES
 York, Jeremy Schulenburg, Indianapolis, IN, UNITED STATES
 Parkhurst, Brandon Lee, Indianapolis, IN, UNITED STATES

| | NUMBER | KIND | DATE |
|--|---|------|---------------|
| PATENT INFORMATION: | US 2003100576 | A1 | 20030529 |
| | US 6743794 | B2 | 20040601 |
| APPLICATION INFO.: | US 2002-130800 | A1 | 20020521 (10) |
| | WO 2000-US32443 | | 20001211 |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | ELI LILLY AND COMPANY, PATENT DIVISION, P.O. BOX 6288, INDIANAPOLIS, IN, 46206-6288 | | |
| NUMBER OF CLAIMS: | 71 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 14296 | | |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. | | | |

AB The present invention further relates to a method of inhibiting MRP1 in a mammal which comprises administering to a mammal in need thereof an effective amount of a compound of formula (I).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | | |
|--------------------|--|--------|
| L22 ANSWER 8 OF 12 | USPATFULL | on STN |
| ACCESSION NUMBER: | 2002:22489 USPATFULL | |
| TITLE: | Spiro compounds as inhibitors of fibrinogen-dependent platelet aggregation | |
| INVENTOR(S): | Fisher, Matthew J., Carmel, IN, UNITED STATES Jakubowski, Joseph A., Indianapolis, IN, UNITED STATES Masters, John J., Indianapolis, IN, UNITED STATES Mullaney, Jeffrey T., Indianapolis, IN, UNITED STATES Ruterbories, Kenneth J., Indianapolis, IN, UNITED STATES Paal, Michael, Hamburg, GERMANY, FEDERAL REPUBLIC OF Ruhter, Gerd, Hamburg, GERMANY, FEDERAL REPUBLIC OF Schotten, Theo, Vierhoefen, GERMANY, FEDERAL REPUBLIC OF Stenzel, Wolfgang, Reinbek, GERMANY, FEDERAL REPUBLIC OF Scarborough, Robert M., Belmont, CA, UNITED STATES | |

| | NUMBER | KIND | DATE |
|--|--------|------|------|
|--|--------|------|------|

PATENT INFORMATION: US 2002013325 A1 20020131
 US 6528534 B2 20030304
 APPLICATION INFO.: US 2001-899886 A1 20010706 (9)
 RELATED APPLN. INFO.: Division of Ser. No. US 1998-43846, filed on 5 Oct
 1998, GRANTED, Pat. No. US 6291469 A 371 of
 International Ser. No. WO 1996-US15703, filed on 27 Sep
 1996, UNKNOWN

| | NUMBER | DATE |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 1995-4557P | 19950929 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660 | |
| NUMBER OF CLAIMS: | 26 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 3239 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to certain spirocyclic compounds substituted with both basic and acidic functionality, which are useful in inhibition of platelet aggregation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 9 OF 12 USPATFULL on STN
 ACCESSION NUMBER: 2001:158292 USPATFULL
 TITLE: Spiro compounds as inhibitors of fibrinogen-dependent platelet aggregation
 INVENTOR(S): Fisher, Matthew J., Carmel, IN, United States
 Jakubowski, Joseph A., Indianapolis, IN, United States
 Masters, John J., Indianapolis, IN, United States
 Mullaney, Jeffrey T., Indianapolis, IN, United States
 Ruterborries, Kenneth J., Indianapolis, IN, United States
 Paal, Michael, Hamburg, Germany, Federal Republic of
 Ruhter, Gerd, Hamburg, Germany, Federal Republic of
 Scarborough, Robert M., Belmont, CA, United States
 Schotten, Theo, Vierhoefen, Germany, Federal Republic of
 of
 Stenzel, Wolfgang, Reinbek, Germany, Federal Republic of
 PATENT ASSIGNEE(S): Eli Lilly and Company, Indianapolis, IN, United States
 (U.S. corporation)
 COR Therapeutics Inc., San Francisco, CA, United States
 (U.S. corporation)

| PATENT INFORMATION: | NUMBER | KIND | DATE |
|---------------------|-----------------|------|--------------------------|
| PATENT INFORMATION: | US 6291469 | B1 | 20010918 |
| APPLICATION INFO.: | WO 9711940 | | 19970403 |
| APPLICATION INFO.: | US 1998-43846 | | 19981005 (9) |
| APPLICATION INFO.: | WO 1996-US15703 | | 19960927 |
| | | | 19981005 PCT 371 date |
| | | | 19981005 PCT 102(e) date |

| PRIORITy INFORMATION: | NUMBER | DATE |
|-----------------------|---------------------|---------------|
| PRIORITY INFORMATION: | US 1995-4557P | 19950929 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Raymond, Richard L. | |

ASSISTANT EXAMINER: Rao, Deepak R.
LEGAL REPRESENTATIVE: Knobbe, Martens Olson & Bear, LLP
NUMBER OF CLAIMS: 41
EXEMPLARY CLAIM: 1
LINE COUNT: 3418

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to certain spirocyclic compounds substituted with both basic and acidic functionality, as shown by formula (I): ##STR1##

wherein Q, L, A.sub.i, B.sub.j, R.sub.0, R.sub.3, R.sub.10, m, n, p and q are as defined in the disclosure, which are useful in inhibiting of platelet aggregation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 10 OF 12 EPFULL COPYRIGHT 2007 EPO/FIZ KA on STN

ACCESSION NUMBER: 2004:60102 EPFULL
ENTRY DATE PATENT: 20050203
ENTRY DATE PUBLICATION: 20060302
UPDATE DATE PUBLICAT.: 20060906
DATA UPDATE DATE: 20060906
DATA UPDATE WEEK: 200636
TITLE (ENGLISH): CaSR ANTAGONIST
TITLE (FRENCH): ANTAGONISTE DE CASR
TITLE (GERMAN): CASR-ANTAGONIST
INVENTOR(S): Shinagawa, Yuko, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 569-1125, JP; Inoue, Teruhiko, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 569-1125, JP; Kiguchi, Toshihiro, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 569-1125, JP; Ikenogami, Taku, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 569-1125, JP; Ogawa, Naoki, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 5691125, JP; Nakagawa, Takashi, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 5691125, JP; Shindo, Masanori, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 5691125, JP; Soejima, Yuki, 1-1 Murasaki-cho, Takatsuki-shi, Osaka 5691125, JP
PATENT APPLICANT(S): Japan Tobacco Inc., 2-1, Toranomon 2-chome, Minato-ku, Tokyo 105-8422, JP
PATENT APPL. NUMBER: 679466
AGENT: Vossius & Partner, Postfach 86 07 67, 81634 Muenchen, DE
AGENT NUMBER: 100311
DOCUMENT TYPE: Patent
LANGUAGE OF FILING: Japanese
LANGUAGE OF PUBL.: English
LANGUAGE OF PROCEDURE: English
LANGUAGE OF TITLE: German; English; French
PATENT INFO TYPE: EPA1 Application published with search report
PATENT INFORMATION:
PATENT INFORMATION:

| NUMBER | KIND | DATE |
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| NUMBER | KIND | DATE |
|--------|------|------|

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| EP 1630157 | A1 | 20060301 |
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| WO 2004106280 | 20041209 |
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| AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI | |
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| LU MC NL PL PT RO SE SI SK TR | |
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DESIGNATED STATES: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI
APPLICATION INFO.: EP 2004-735338 A 20040528
WO 2004-JP7758 A 20040528
JP 2003-151610 A 20030528
PRIORITY INFO.:

ABEN

The present invention provides a compound having a calcium-sensitive receptor antagonistic action, a pharmaceutical composition containing the compound, particularly a calcium receptor antagonist and a therapeutic drug for osteoporosis. A compound represented by the following formula (1), a pharmaceutically acceptable salt thereof or an optically active form thereof:

(image, imga0001.tif, chem)

wherein each symbol is as defined in the description.

L22 ANSWER 11 OF 12 EPFULL COPYRIGHT 2007 EPO/FIZ KA on STN

ACCESSION NUMBER: 2000:120536 EPFULL
UPDATE DATE PUBLICAT.: 20051109
DATA UPDATE DATE: 20051109
DATA UPDATE WEEK: 200545
TITLE (ENGLISH): METHODS AND COMPOUNDS FOR INHIBITING MRP1
TITLE (FRENCH): METHODES ET COMPOSES DESTINES A INHIBER MRP1
TITLE (GERMAN): VERFAHREN UND VERBINDUNGEN FUER DIE HEMMUNG VON MRP1
INVENTOR(S): BONJOUKLIAN, Rosanne, 318 Dominion Drive, Zionsville, IN 46077, US; COHEN, Jeffrey, Daniel, 1411 Shawnee Road, Indianapolis, IN 46260, US; GRUBER, Joseph, Michael, 9272 Shady Bend, Brownsburg, IN 46112, US; JOHNSON, Douglas, Webb, 235 Saddlebrook Court, Zionsville, IN 46077, US; JUNGHEIM, Louis, Nickolaus, 8218 Meadowbrook Dive, Indianapolis, IN 46240, US; KROIN, Julian, Stanley, 8418 Hilltop Drive, Indianapolis, IN 46234, US; LANDER, Peter, Ambrose, 5407 North Capitol Avenue, Indianapolis, IN 46208, US; LIN, Ho-Shen, 8128 Trevellian Way, Indianapolis, IN 46217, US; LOHMAN, Mark, Christopher, 1924 Oxford Lane, Superior, Colorado 80027, US; MUEHL, Brian, Stephen, 530 Leisure Lane, Greenwood, IN 46142, US; NORMAN, Bryan, Hurst, 8648 Admirals Bay Drive, Indianapolis, IN 46236, US; PATEL, Vinod, Francis, 3 Mossy Lane, Bellows Farm, Acton, MA 01720, US; RICHETT, Michael, Enrico, 5832 Baron Court, Indianapolis, IN 46250, US; THRASHER, Kenneth, Jeff, 8660 Count Turf Court, Indianapolis, IN 46217, US; VEPACHEDU, Sreenivasarao, 1145 Amarillo Avenue, 3 Palo Alto, California, CA 94303, US; WHITE, Wesley, Todd, 5432 Black Bear Circle, Indianapolis, IN 46239, US; XIE, Yongping, 19 Huntington Circle Apartment 15, Naperville, IL 60540, US; YORK, Jeremy Schulenburg, 8866 Doral Drive, Apartment F., Indianapolis, Indiana 46250, US; PARKHURST, Brandon, Lee, 144 Jonquill Drive, Indianapolis, IN 46227, US; WANG, Quiping, 1404 Aspen Glen Drive, Hamden, Connecticut 06518, US
PATENT APPLICANT(S): ELI LILLY AND COMPANY, Lilly Corporate Center, Indianapolis, Indiana 46285, US
PATENT APPL. NUMBER: 204942
AGENT: Burnside, Ivan John, Eli Lilly and Company Limited
AGENT NUMBER: 91033
DOCUMENT TYPE: Patent
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
LANGUAGE OF PROCEDURE: English
LANGUAGE OF TITLE: German; English; French
PATENT INFO TYPE: EPB1 Granted patent

PATENT INFORMATION:

PATENT INFORMATION:

| NUMBER | KIND | DATE |
|--|------|----------|
| NUMBER | KIND | DATE |
| EP 1250340 | B1 | 20041117 |
| WO 2001046199 | | 20010628 |
| AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR | | |
| EP 2000-986242 | A | 20001211 |
| WO 2000-US32443 | A | 20001211 |
| US 1999-171373P | P | 19991222 |
| US 2000-226076P | P | 20000817 |
| US 2000-234539P | P | 20000922 |
| WO 9934897 | A | |
| WO 9951227 | A | |
| WO 9951228 | A | |
| WO 9951236 | A | |

L22 ANSWER 12 OF 12 EPFULL COPYRIGHT 2007 EPO/FIZ KA on STN

ACCESSION NUMBER: 1996:62745 EPFULL
 UPDATE DATE PUBLICAT.: 20060406
 DATA UPDATE DATE: 20060405
 DATA UPDATE WEEK: 200614
 TITLE (ENGLISH): SPIRO COMPOUNDS AS INHIBITORS OF FIBRINOGEN-DEPENDENT PLATELET AGGREGATION
 TITLE (FRENCH): COMPOSES SPIRO COMME INHIBITEURS DE L'AGREGATION DE PLAQUETTES DEPENDANTE DU FIBRINOGENE
 TITLE (GERMAN): SPIRO VERBINDUNGEN ALS INHIBITOREN DER FIBRINOGEN-ABHAENGIGEN BLUTPLAETTCHEN AGGREGATION
 INVENTOR(S): FISHER, Matthew, J., 4106 Armon Court, Carmel, IN 46033, US; JAKUBOWSKI, Joseph, A., 3740 Governors Road, Indianapolis, IN 46208, US; MASTERS, John, J., 8338 Crystal Pointe Lane, Indianapolis, IN 46236, US; MULLANEY, Jeffrey, T., 6153 Welker Drive, Indianapolis, IN 46236, US; PAAL, Michael, Hummelsbuettel Kirchenweg 11, D-22335 Hamburg, DE; RUEHTER, Gerd, Vierzigstuecken 53 a, D-21129 Hamburg, DE; RUTERBORIES, Kenneth, J., 6747 Bluffridge Court, Indianapolis, IN 46278, US; SCARBOROUGH, Robert, M., 2544 Belmont Canyon Road, Belmont, CA 94002, US; SCHOTTEN, Theo, Hinter Bach 34, D-21444 Vierhoefen, DE; STENZEL, Wolfgang, Lerchenweg 8, D-21465 Reinbek, DE
 PATENT APPLICANT(S): ELI LILLY AND COMPANY, Lilly Corporate Center, Indianapolis, Indiana 46285, US; MILLENNIUM PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, Massachusetts 02139, US
 PATENT APPL. NUMBER: 204942; 2190396
 AGENT: Vossius & Partner, Postfach 86 07 67, 81634 Muenchen, DE
 AGENT NUMBER: 100311
 DOCUMENT TYPE: Patent
 LANGUAGE OF FILING: English
 LANGUAGE OF PUBL.: English
 LANGUAGE OF PROCEDURE: English
 LANGUAGE OF TITLE: German; English; French
 PATENT INFO TYPE: EPB1 Granted patent
 PATENT INFORMATION:
 PATENT INFORMATION:

| NUMBER | KIND | DATE |
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| NUMBER | KIND | DATE |
|---|------|----------|
| EP 854869 | B1 | 20040825 |
| WO 9711940 | | 19970403 |
| AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE | | |
| EP 1996-936093 | A | 19960927 |
| WO 1996-US15703 | A | 19960927 |
| US 1995-4557P | P | 19950929 |
| EP 635492 | A | |
| EP 655439 | A | |
| WO 9514683 | A | |
| WO 9638426 | A | |
| US 5451578 | A | |

DESIGNATED STATES:

APPLICATION INFO.:

PRIORITY INFO.:

CITED PATENT LIT.: